Workshop on

"THE CHEMICAL WEAPONS CONVENTION: BETWEEN DISARMAMENT AND INTERNATIONAL HUMANITARIAN LAW"

Sanremo, Italy – Villa Nobel

15 February 2008

Organized by the

International Institute of Humanitarian Law

With the support of

Italian Ministry of Foreign Affairs

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WELCOME ADDRESS

Ladies and Gentlemen,

It is a great pleasure for me to welcome you all – participants and guests – to this Seminar.

I am particularly grateful to the President of the Province of Imperia, Avvocato Gianni Giuliano, who has given us the possibility to hold this meeting in the prestigious framework of Villa Nobel. This was the home of Alfred Nobel in his later years, where he achieved his major scientific successes and conveyed his humanitarian message to the world. The Villa was also where the International Institute of Humanitarian Law (IIHL) – of which I have the privilege to be President – was founded in 1970 and had its original headquarters, before moving to Villa Ormond, the beautiful premises made available by the Municipality of Sanremo, to which the Institute is profoundly indebted.

La Farnesina – the Italian Ministry of Foreign Affairs – deserves special recognition for its encouragement and its generous support, without which this event would not have been conceivable. I am particularly grateful to the Director General for Political Affairs and Human Rights, Ambassador Giulio Terzi di Sant'Agata, for his counsel and help, and to my old friend and colleague, Ambassador Antonio Catalano di Melilli who represents La Farnesina here today.

We are immensely grateful to Professor Natalino Ronzitti, one of the most prominent scholars in international humanitarian law, who so kindly accepted to be the

Academic Coordinator of the Seminar. My sincere thanks also go to the moderators of the three panels.

I would like to address a very warm welcome to H.E. Rogelio Pfirter, the OPCW Director General, who will set the tone of the debate by his key-note address in a few minutes.

I highly value the presence among us of Ambassador Tea Petrin, on behalf of the UE Slovenian Presidency, and of so many distinguished participants – ambassadors, academics and practitioners of different countries – who have responded positively to our invitation.

As you all know, the IIHL's primary purpose is the promotion and the development of international humanitarian law through education, research, constructive dialogue, in an informal context, among highly-qualified experts and with interested Governments. Almost forty years of experience have made the Institute a centre of excellence, well known all over the world for its courses on the law of armed conflicts, human rights, refugees and migration.

Every year in Sanremo we bring together hundreds of officers, military lawyers, humanitarian operators, legal advisers from different countries and continents.

This meeting was preceded, in November, by a workshop on weapons of mass destruction and international humanitarian law. It will be followed, next month, by a seminar organized in Rome, with the cooperation of CASD (Centro Alti Studi per la Difesa) and SIOI (Società Italiana per l'Organizzazione Internazionale), with the participation of major international Organizations (UN, EU, NATO, ICRC, etc), focusing on the interrelationship between international humanitarian law and international peace operations.

In a rapidly changing security environment, it becomes imperative for Governments, the scientific community and civil society to carefully monitor the respect of humanitarian law in all circumstances, to encourage its further development and to closely look at the compliance with humanitarian provisions and internationally recognized standards, not only in the case of international wars, or internal conflicts fought within the territory of a State, but also in new, more volatile situations of violence, involving non-State actors, where the protection of life, health and personal dignity of human beings are equally threatened.

The security scenarios are going through dramatic changes and are profoundly challenged by a new generation of threats and risks, such as international terrorism and the proliferation of weapons of mass destruction.

The debate on international humanitarian law assumes a new urgency and should ensure a full implementation of existing norms; encourage a better awareness of the differences and the complementarities of the various bodies of laws; identify possible loopholes and "grey-zones"; improve and expand, whenever possible, the scope of the protection of victims of armed conflicts.

The case of chemical warfare has always been central to the debate on international humanitarian law, disarmament and proliferation.

The use of poisoning substances against the enemy was already condemned by the Romans. *"Armis bella non venenis geri"* (War is fought with weapons not with poisons), they have judiciously advised ever since the old times.

The 1925 Geneva Convention, explicitly prohibiting the use of chemical weapons, codifies norms that are a core element of customary international humanitarian law.

Chemical weapons, for their inhumane, indiscriminate effects, are definitely among the weapons banned by the Additional Protocols to the Geneva Conventions, when they prohibit the use, production and stockpiling of "*weapons, projectiles and materials… of a nature to cause superfluous injuries and unnecessary suffering*"; when they prohibit "*attacks and methods of combats that can cause extensive, enduring and severe damages to the natural environment*".

Yet, despite the existence of a widely recognized set of customary and conventional restrictions, the 20th century witnessed an unprecedented accumulation of chemical and biological weapons by different countries.

The Chemical Weapons Convention signed in 1993 has now been in force for a decade. I took part, many years ago, in the negotiations held in Geneva within the Conference on Disarmament, and I still remember what a hard negotiation it was. Banning the development, production, stockpiling, transfer and use of these dreadful weapons has been a major accomplishment of the International Community. We finally achieved an innovative, universal treaty, a global disarmament agreement establishing for the first time a cooperative institutional framework for the destruction of declared productions, for the

peaceful use of chemistry, for the protection of the population and humanitarian relief in the case of attacks with chemical weapons.

I think we all should acknowledge the success story of the OPCW in its difficult and noble mission.

According to more recent reports, over 98% of the world's population now lives in areas where the CW Convention is law. A sophisticated inspection mechanism is in function. Stockpiles of important chemical weapons have already been eliminated. An increasing number of countries is benefiting from the international cooperation programs conducted by the OPCW.

Within a few weeks The Hague will host the Second Review Conference.

I think this seminar provides a timely and useful opportunity for a sober, informal assessment of the challenges ahead, both from the international humanitarian law and disarmament viewpoint.

Concerning chemical warfare, we are now able to rely upon a robust, effective legal regime. Yet we are all aware that the threat of the potential use of biological and chemical weapons by international terrorism cannot be neglected, underrated or ruled out.

Chemical weapons are considered by the United Nations weapons of mass destruction. They are generally registered together with nuclear and biological weapons under the same rubric. But there are substantive differences. Biological and chemical weapons are intrinsically harder to be detected and addressed than nuclear weapons. Chemical agents are often inexpensive and easily accessible. The threshold is often difficult to be settled. There are, definitely, ample reasons for vigilance, if not for concern.

We should not forget that there are countries – even if they are few – that are not yet Parties to the Convention. There are non-State actors that might turn chemical agents into weapons.

It is no way my intention to try to anticipate the direction of the debate.

I believe however that there are goals that we all could and should share.

Our first aim should be to upgrade the level of international commitment to the CWC, ensuring universal adherence to it. States that are not yet Parties to the Convention should be urged to ratify or accede to the Convention without further delay.

A second objective of paramount importance would be to promote the adoption of national implementing legislation, where it has not yet been adopted. Effective national implementation of the CWC Regime is a vital factor for its success.

In a globalised society, we should finally aim to increasing the awareness of the risk of seeing the important and beneficial progresses made by the scientific community and the industry in pharmacology, life sciences and biotechnologies turned into a hostile use.

All these are major, common challenges. I think we – diplomats, lawyers, military people – all have the duty to address them and try to find the responses – as the ICRC has repeatedly recalled – through the development of a "*culture of responsibility*". A task we can deal with here today in what the many friends of the Institute around the world call the "*constructive spirit of Sanremo*".

Antonio CATALANO di MELILLI
Italian Ministry of Foreign Affairs

WELCOME ADDRESS

First of all, let me warmly thank the Director General of the Organization for the Prohibition of Chemical Weapons, Ambassador Rogelio Pfirter, for having accepted to participate at this Seminar, and the President of the International Institute for Humanitarian Law, Ambassador Maurizio Moreno. The Ministry of Foreign Affairs and, in particular, the National Authority for the Implementation of the Convention for the Prohibition of Chemical Weapons, has supported the organization of this Seminar. This initiative was taken in order to contribute to the debate in view of the Second Review Conference of the Convention to be held in The Hague in April. The Convention constitutes a very important tool for disarmament, non proliferation, security and humanitarian law. Before we come to the heart of the debate, I would like to mention the fact that Mr. Massimo d'Alema, Italian Minister of Foreign Affairs, has often referred to disarmament and non proliferation as one of the main priorities on the agenda of the Italian foreing policy in 2009.

After the end of the Cold War, the issue of disarmament has gradually lost its momentum. Now time has come to bring it back on the international security agenda. The Convention represents one of the most complete instruments realized so far in the field of disarmament. It bans a whole category of weapons of mass destruction. Furthermore, it has established a thorough and intrusive verification regime. The Convention today is one of the most effective means to fight proliferation of weapons of mass destruction. It sets higher standards for a verification system, thus enhancing the prevention of a new dangerous threat: a terrorist attack with weapons of mass destruction. The Convention also represents a very effective instrument of humanitarian law; it forbids the use of chemical weapons even for retaliation, thus consolidating the concept that the use of these weapons

has to be considered as an international crime. In this respect, I am glad to have here with us today Prof. Natalino Ronzitti, who has dedicated much of his studies to these issues that will be extensively illustrated in the third session of the Seminar. Against the undoubted achievements of the Convention, many challenges lie ahead both in the process of total elimination of all chemical weapons within the deadline of 2012 and in the strengthening of the verification regime. These challenges are both political and practical.

The greatest political challenge remains universality. It is true that the number of State Parties is very high, especially when compared with figures of other major treaties. Still, in the disarmament and non proliferation domain, against the backdrop of the ultimate goal of total destruction of such weapons of mass destruction, missing ratification on the part of twelve countries is a reason for concern. In particular, I would like to focus on the Mediterranean and Middle Eastern region, where the concentration of States that are not yet Party to the Convention is the most visible. It has often been said that the adhesion of these countries would represent a very important means of *détente* to reinforce ties between Parties. Not only would universality represent a significant step for disarmament, but also an effective drive to international cooperation, thus contributing to the stability of the Mediterranean and the Middle East, in the shared vision of a world free of chemical weapons. In this respect, I wish to acknowledge Ambassador Pfirter's tireless work dedicated to the shared objective of making this ban truly universal. He really is a strong champion for this cause of universality.

In October 2006, Italy, in cooperation with the OPCW and the EU, hosted in Rome an outreach event specifically dedicated to promoting the Convention and its uniform adoption by countries of the Mediterranean and Middle Eastern region. Several other initiatives have taken place. However, more needs to be done.

Equally important is the challenge posed by the full and fair implementation of the obligations set by the Convention, also through the adoption of an adequate national legislation by the States Parties. Verification of implementation should be further reinforced by the application of all provisions provided for by the treaty itself. I will not dwell upon the many practical challenges, as they will be addressed by some of the speakers in the various sessions of this Seminar.

Instead, I would like to underline Italy's firm commitment to pursuing "effective multilateralism" and strengthening the disarmament and non proliferation system based on treaties of universal scope. Few days ago, also in view of this Seminar, I was reading the European Strategy of non proliferation of weapons of mass destruction, adopted at the end of the semester of Italian Presidency of the European Union in 2003. Its enduring value did not fail to impress me once again. *"The proliferation of weapons of mass destruction is today considered, together with regional conflicts, one of the main threats to international peace and security. Our conviction is that a multilateral approach to security, including disarmament and non proliferation, provides the best way to maintain international order and hence our commitment to uphold, implement and strengthen the multilateral disarmament and non proliferation treaties and agreements; and to support the multilateral institutions charged respectively with verification and upholding of compliance with these treaties. The EU policy is to pursue the implementation and the universalisation of the existing disarmament and non proliferation norms. If the multilateral treaty regime is to remain credible it must be made more effective."* I think we have here enough food for thought.

The most distinguished and authoritative speakers, who will take the floor today, will thoroughly take stock of the many achievements of the Convention and consider its shortcomings and prospects. The Second Review Conference is a major opportunity to collectively reiterate our determination to eradicate WMDs, and confirm our commitment to preserving multilateralism and the international disarmament and non proliferation architecture based on conventions of universal scope. Our presence today is proof of how much we believe in this commitment.

Thank you for your attention.

Rogelio PFIRTER

Director-General, Organization for the Prohibition of Chemical Weapons (OPCW),

The Hague

OPENING ADDRESS

Excellencies,

Distinguished Guests,

Ladies and Gentlemen,

It is a great honor for me to be here today at the International Institute of Humanitarian Law.

The Institute has a long and distinguished history of contributing to advance international humanitarian law and its dissemination. This is also true as regards questions relating to disarmament. I am particularly grateful to the Institute and to the Government of Italy for their continuous support for the goals of the Chemical Weapons Convention (CWC).

The CWC represents a major advancement in the development of international humanitarian law. The OPCW is grateful that the Institute and Italy have highlighted this theme on a regular basis through their programmes of seminars and conferences.

The Second Review Conference of the CWC opening in April in The Hague presents a significant opportunity for OPCW Member States to reaffirm the critical importance of the Convention.

The Conference will assess the operation of the Convention over the past five years, consider the implementation challenges and provide strategic direction for the future. Indeed, the scope of the Review Conference is not to change the provisions of the Convention but to assess and enhance their effectiveness.

Member States, the chemical industry, the academia and civil society organisations – all have a crucial role to play towards ensuring that the Convention and the OPCW maintain the capacity to respond to the challenges of a rapidly evolving world.

The humanitarian drive that brought nations together to eliminate the scourge of war by "plague and poison" has a long history. The ultimate ambition of a comprehensive, verifiable prohibition on chemical weapons was finally realised in the form of the Chemical Weapons Convention.

After ten years of dedicated implementation of that instrument, we can all take satisfaction from the high standing that the Organisation for the Prohibition of Chemical Weapons (OPCW) has achieved by making steady progress in its unique mission.

Our Membership has grown at a remarkable pace. With a total number of 183 States Parties, today there remain only 12 countries that have not joined the Convention. This broad participation in the Convention provides strong legal and moral authority to its prohibitions.

Compared to instruments of a similar nature, only the CWC comprehensively prohibits an entire category of weapons of mass destruction, and provides for their complete elimination under conditions of strict verification. Our task also includes ensuring the non-proliferation of chemical weapons and coordination of assistance and protection against chemical weapons and promoting programmes of international cooperation for peaceful uses of chemistry.

In all these areas, the OPCW has made important strides in the first ten years of its operation. Progress in the disarmament agenda is signified by the fact that out of the 70,000 metric tonnes of Category 1 chemical weapons declared by Albania, a State Party, India, the Russian Federation, and the United States of America, a total of 25,239 metric tonnes or over 36% has already been destroyed.

All possessor States Parties have made significant progress. The United States and Russia have destroyed around 50% and 25% of their stockpiles. India has already destroyed 92% of its chemical weapons stockpile and is expected to reach its 100% target by April 2009. Another State Party has accomplished 96% destruction of its inventory and is expected to finish the process by the end of 2008. The Libyan Arab Jamahiriya's chemical weapons stockpile is expected to be destroyed by the year 2011. It is in the process of

finalising arrangements for setting up the destruction facility at which this task will be carried out.

Of the 65 chemical weapons production facilities declared by 12 States Parties, 94% have either been destroyed or converted for peaceful purposes, in accordance with the Convention. The remaining represent 4 facilities of which three will be converted and one destroyed.

An effective and reliable global verification system has been established. This system provides assurances on both the disarmament process and the legitimate chemical industry activities which are of direct relevance to the non-proliferation of chemical weapons.

Since the entry into force of the Convention, OPCW inspection teams have carried out more than 3,000 inspections at over 1,080 military and industrial sites in 80 countries, confirming the fact that such verification activities have the support of all States Parties.

To obtain sufficient assurances from the functioning of the Convention's non-proliferation system, it is also essential that all States Parties establish and enforce the legislative and administrative measures required under its Article VII. These measures give legal power to the prohibitions of the Convention at the national level.

The Secretariat has worked actively to support Member States through a wide range of activities. These efforts have paid good dividends, as it emerges clearly from the figures representing progress of States Parties in establishing National Authorities, enacting necessary legislation and taking the relevant administrative steps to implement the Convention. We are now approaching 50% of the States Parties that have comprehensive legislation in place.

International cooperation and assistance, as envisioned in Articles X and XI of the Convention, are matters of great importance to the OPCW. The OPCW is making further efforts towards the full implementation of both provisions.

The Secretariat has continued to enhance its assistance and protection activities. A protection databank that will soon be available to Member States through the internet has been established. We have also entertained requests by States Parties for programmes to develop and improve their capacity to protect themselves against chemical weapons. At the

same time, the Secretariat continues to maintain its ability to manage international response, and to encourage regional cooperation by organising relevant workshops and courses.

Advancing international cooperation within the meaning of Article XI is as high a priority on our agenda. In this area, the Organisation has designed a broad range of programmes that focus on promoting compliance with the Treaty as well as enhancement of national capacities in the peaceful applications of chemistry.

As for the way forward, I have expressed my views on these questions in an extensive note that the Technical Secretariat circulated to Member States in November 2007. Allow me to briefly touch upon the salient issues.

The completion of chemical weapons disarmament by the Convention's time lines is at the core of the current phase of implementation.

Despite the impressive progress that I have mentioned, some 64% of the declared Category 1 chemical weapons stockpile is yet to be destroyed in the remaining four and a half years. All remaining possessor States Parties will need to keep up the momentum and spare no effort to that end. The challenge is particularly significant for the Russian Federation and the United States of America. Both have a substantive amount of Category 1 chemical weapons to destroy.

As I see it, the question should be approached from a twofold perspective. On the one hand, there is no doubt about the solemn obligation of possessor States to complete the destruction process by the extended deadlines established pursuant to the Convention.

On the other hand, it is also important to consider the issue in the light of progress that has been made and the commitment to their obligations which all possessor States have demonstrated. One possessor State has already fulfilled its obligations, two are close to reaching the end of their destruction programmes. Such objective considerations serve as a reassurance that the Convention's disarmament provisions are being complied with.

It is also a fact that both major possessor States have succeeded in meeting their revised intermediate deadlines. Furthermore, the number of new destruction facilities coming online recently and plans for additional facilities are positive signs of their good faith to fulfill their obligations.

It is now essential that possessor States continue to prove their clear commitment towards achieving this crucial goal. They have to do this, both at the political level, as well as in terms of ensuring the availability of the necessary financial resources to successfully carry out the process, especially concerning the commissioning of new destruction facilities to complete the work on time.

However, given the magnitude of the task that remains outstanding, it is not possible to say precisely what the situation might be closer to the final deadline in 2012. This matter will no doubt be closely monitored for progress being made, bearing in mind that the Treaty provisions, Article VIII in particular, provide the possibility to deal constructively with the matter as it develops. And, if the future situation so requires, States Parties may even consider holding at an appropriate date close to 2012, a Special Session of the Conference in order to review the status of destruction and agree on an appropriate course of action.

As we get closer to completing the destruction of existing arsenals, ensuring that such weapons do not re-emerge will assume an increasing importance for the OPCW. This will require further attention to industry verification, as well as monitoring developments in science and compliance with treaty provisions on transfers and trade in chemicals.

In this context, it will be important to continue developing the regime in a way that balances the underlying risks and, at the same time, ensures adequate levels of verification of the four categories of inspectable chemical facilities.

As I mentioned often times before, the Secretariat remains apprehensive about the present insufficient level of verification at a category of facilities known under the Convention as "*other chemical production facilities*" or OCPFs.

The reasons are manifold. On the one hand, a relevant number of declared OCPFs have technological characteristics that could be easily and quickly re-configured for the production of chemical weapons. In addition, as a result of the application of the existing site-selection methodology, Member States with fewer declared plants sites have received proportionately significantly more inspections than Member States with a larger number of facilities. Finally, the Secretariat has had to rely on the restricted data included in the declarations in accordance with the Convention. This, in turn, led to the inspection of a

number of OCPFs that were either not as relevant as might have been expected or not inspectable at all.

We need to gradually increase the annual number of inspections in the OCPFs category in order to maintain confidence in the CWC verification regime. Interim steps have already been taken to provide for fairer distribution of inspections. States Parties need to reach conclusions in devising a durable selection methodology as prescribed in the Convention.

OCPF inspections would also be better focused on more relevant facilities, if Member States could agree to provide more specific data in their OCPF declarations. The Secretariat could use such data to direct the inspection effort in a more effective, selective, and relevant manner, while at the same time avoiding unnecessary inspections.

The efficiency of the verification regime would also be greatly enhanced if declarations of OCPFs were accurate and updated in a timely fashion.

It is my hope that the Review Conference will give due consideration to the issues that I have just touched upon since those aspects of our work are, indeed, vital to strengthening the non-proliferation provisions of the Convention.

Also relevant to the future effectiveness of the Convention is how we take into account the impact of science and technology. Rapid advances have not only transformed the character of the chemical industry, but also opened up new and unprecedented areas.

The increasing overlap between chemistry and biology and the phenomenon of production of chemicals through biologically mediated processes point to a need to consider the adequacy of our verification methods. We need to ensure that the OPCW verification mechanism continues to provide a sufficient degree of confidence that the industrial activities of States Parties remain in compliance with the Convention's non-proliferation requirements.

The pace of progress of science also opens up the possibility of discovery or synthesis of new chemicals with properties that make them relevant to the Convention. The issue of novel toxic chemicals is hardly new, but what has changed is the significantly reduced time required for the initial screening of newly synthesised compounds. It is essential to understand how those new developments could affect the production of precursors chemicals or toxic chemicals that can be weaponised.

Of similar concern is the problem of incapacitating agents and how further advances in this field could impact the Convention. Both are important areas for consideration at the Conference.

These issues highlight the need for full support to the Scientific Advisory Board and its temporary working groups and I hope that this would be forthcoming from the Review Conference.

In the face of these contemporary developments, the validity of the 'General Purpose Criterion' as enshrined in the Convention assumes greater importance. The Convention prohibits the use of all toxic chemicals as a means of warfare and in any other way proscribed by it. Therefore, it is important for Member States to remain fully cognisant of this key criterion in the Convention when they review their national implementation, as well as assess the impact of new developments.

It is also of the utmost importance that a culture of responsibility be promoted among the scientific and industrial communities, as this is the primary means to ensure that advances are exclusively used for the benefit of mankind. In this work, I look forward to the finalisation of a code of conduct that the OPCW is developing together with the International Union of Pure and Applied Chemistry (IUPAC).

The Universality Action Plan, called for by the First Review Conference, has directly contributed to the increase in the membership of the OPCW. Since the First Review Conference in 2003, 29 States have joined the Convention.

We now need to focus on the remaining 12 countries. We know that this task will not be easy in some cases such as the Middle East and in the Korean Peninsula, where specific political and security considerations continue to be cited as the reasons for abstention.

The Secretariat's efforts, especially in these regions can greatly benefit from assistance and cooperation of Member States. At the same time, the Technical Secretariat and I will continue our work with the remaining States not Party under the guidance of the Policy-Making organs and of the Review Conference.

The positive impact of universal adherence can be fully felt only if the obligations contained in the Convention are thoroughly implemented at the national level. Here again, an excellent example of how a Review Conference can channel our attention and energies

to address a specific area of concern is illustrated in the Action Plan that was adopted by the 1st Review Conference to enhance the implementation of Article VII.

But as we are still far from reaching our goals as identified in the Action Plan on implementation, this issue will also occupy an important place on the agenda of the 2nd Review Conference.

Although the work of the OPCW has led to greatly reducing the dangers of chemical weapons, the possibility of their use cannot yet be excluded. This is particularly true in the context of heightened concerns about terrorism that might involve chemical weapons or toxic chemicals.

This underlines the importance of full implementation of Article X of the Convention concerning coordination and delivery of assistance to States Parties in emergencies involving the use or threat of use of chemical weapons.

The OPCW has managed to provide a considerable degree of service in this area and I would welcome enhanced voluntary contributions that would enable us to further augment these critical programmes.

At the same time, the Organisation will have to continue to improve its own ability to prevent and alleviate human suffering in situations of threatened or actual use of chemical weapons. The Organisation's capability to respond to requests for assistance in a prompt and effective fashion needs to be further enhanced. And internal procedures and coordination with relevant agencies and organisations will have to be improved, in parallel with enhancing States' capabilities to provide local response.

Operating within the parameters of its well-defined mandate, the OPCW also needs to continue to support the international community in the context of anti-terrorism efforts. There is a clear expectation in this regard as highlighted in the UN Global Counter-terrorism Strategy and UN Security Council Resolution 1540.

Our support in these endeavors has been appreciated by the UN Secretary-General, and we look forward to further guidance by the Review Conference in terms of strengthening institutional cooperation with international and regional organisations.

The Convention has proved to be an important and effective instrument in contributing to the advancement of treaty and customary law. As a multifaceted legal tool, the Convention is at the same time an advanced international humanitarian law treaty and

an innovative disarmament agreement. By striving to eliminate forever, for the benefit of mankind, the possibility to use chemical weapons, the Convention realizes the vision of a world free from this deadly and inhuman scourge.

I have stressed on many occasions, that the Convention and the OPCW are also exemplary in terms of successful multilateralism. Our States Parties have achieved solutions to difficult problems because they are guided by the high ideals of the Convention that must be preserved and promoted further.

I am confident that the 2nd Review Conference will also be conducted and concluded in this same spirit.

I thank you for your attention

The Politics of Review Conferences

Andrea NEGROTTO CAMBIASO
Former Permanent Representative of Italy to the UN and
to the Conference on Disarmament, Geneva

THE POLITICS OF REVIEW CONFERENCES

I want to thank the people in Sanremo, the people in the province of Imperia for their warm welcome, the facilities they gave us in order to address this extremely topical question. We are involved and we are asked to make a contribution to the question of Review Conferences mainly in the field of chemical weapons but not only. In fact the title is "*The Politics of Review Conferences*" in general terms. My personal know-how, you know I am now Ambassador *retraité,* on the Chemical Weapons Convention is based on the experience I had the privilege to gain in participating in Geneva, from 1990 to 1992, to the two conclusive years of the Chemical Weapons Convention negotiations. We successfully finalised the Convention, perhaps we were not fully aware at that time that we were in a sort of magic moment for disarmament that led to that unprecedented achievement: the Chemical Weapons Convention. That magic moment for disarmament has not yet come again and I would say, on the contrary, and it is good that we know that you, who are preparing the Second Review Conference, know that the environment, in general terms, for disarmament, both in Europe and in the world, is far from being a good environment. I think that this has to be kept in mind. Perhaps I am still under the surprise and the impression of the speech made in Geneva, two or three days ago, by the Russian Foreign Minister, Mr. Lavrov, on disarmament questions. I had not heard the language that I heard for a long time. Of course, I am not judging anyone, but simply recall what the situation is today concerning disarmament.

So let us come back briefly, already the previous speakers have outlined the importance of this universal instrument which was not only created to destroy what in the past was done with enormous costs. This is a scandal for many people: with enormous costs we are trying to destroy what was made in the past and without seeing through what was done in the past. But in the meanwhile the Chemical Weapons Convention has created

capacities of monitoring that in the future, at least, such hideous weapons will not come again. The concrete and complex system of verification, perhaps the most ambitious of which was the so called challenge inspection procedures, was so intrusive and innovative that it has not been utilized so far. But it is embedded in the *acquis* of the Convention as a precious potential tool and as a precedent not to be forgotten.

What is a Review Conference? A Review Conference is not there to review anything of the substance of a disarmament treaty. It might improve some treaty language because it is objectively outdated, it might find possible interpretations or take stock of later developments in science, technology, strategy, or simply in arms control policies. A Review Conference can also, most importantly, provide an opportunity to check the mood, let us say, of member States and the mood of public opinion, as it has been the case, for instance, with the NPT which is the first disarmament treaty introducing, just forty years ago, a Review Conference. As we know, that was a compromise way out of the dilemma, crucial at that time, of the duration of the NPT treaty expiring for most nuclear countries. They skilfully then decided to review the question in 1995 and meanwhile paved the way with Review Conferences that would offer periodically to non nuclear countries at least an opportunity to put the nuclear ones under some pressure. The first Review Conference has featured the others in different disarmament fields and treaties. They were a good blend of politics, and sometimes routine, but all of them were useful and deserve to be kept alive, all the more so, when related to treaties which do not enjoy the best of health. With the Chemical Weapons Convention it is a different case because of its wide control mechanism on implementation provided by the OPCW on an almost daily basis. The Review Conference is a complementary tool for aspects such as compliance with the terms set for the destruction of chemical weapons, about which Ambassador Pfirter has just spoken, for protection, and prohibition of any use of chemical weapons. It is the core of humanitarian law in this field.

The emergence in the relevant laboratories, or even markets, of new chemical agents eventually to be utilized for the riot control purposes is only a very big question mark. I do not know well the problem, I know it exists and maybe if the States so decide, they could start to examine the issue at the incoming new Review Conference.

We often hear disarmament tycoons affirm that the problem of chemical weapons is solved because they have less strategical value and because the threat is now, as we have heard, confined to possible terrorist attacks on chemical factories or on transportation of chemical agents. I think there is some truth here, but not so much in the fact that terrorists become users of chemical weapons that they have crafted. This seems to me extremely difficult, but the threat is that they can realize attacks against chemical weapons agents. But let us not forget that the relative loss of threat of chemical weapons is due to the success of the Convention and the present work takes place at a time where there is a risk of unravelling the most sensitive and destabilising disarmament *acquis*. Let us keep this treasure untouched waiting with hopes for some political developments. To those involved in the Second Review Conference of the Chemical Weapons Convention, we wish all the best.

Pier Benedetto FRANCESE
Italian Ministry of Foreign Affairs, Rome

A field experience of review conferences, their development, results and ensuing trends, can contribute to the deliberations of this panel under a viewpoint complementary to the academic expertise so distinguishly represented in this panel.

In this respect an overview of the CSCE process, predecessor of the present OSCE, and its periodical follow-up meetings may allow us to make an assessment of the particular practice of review conferences in the realm of international politics and treaty law. As a matter of fact resorting to it has become increasingly frequent in the last three decades, thus requiring an updated evaluation of its role and impact in the rapidly evolving geopolitical, geo-economics and world security context. Furthermore, some relevant comparisons can be drawn with longstanding multilateral organizations and bodies, beginning with the annual General Assembly of the United Nations. On this conceptual basis we can draw similarities and differences - I am afraid sometimes academically questionable - with arms control treaties of which the Chemical Weapons Convention is an archetypal example.

Concerning the CSCE, its relevance for the subject of the present Seminar is enhanced by the role it played in the area of human rights and at the same time of the wider humanitarian issues. A qualified attention to this dimension has progressively become a feature of most arms control agreements, be they either global or regional, and of the inauspiciously recurring violations of its moral, political and legal tenet: an occurrence at the root of most present military confrontations and repressions.

The Helsinki Final Act of 1975 forcefully contributed to changing the life of individuals, groups and national societies, as well as to expanding the overall dimension of international politics. It took place against the background of evolving East-West relations, concurring in changing a balance of power established after the Second World War and buried forty years after. It determinately went beyond the purely military aspects, including in its various "baskets" not a few notions so far unaccounted for in security treaties. As a primary feature it established a linkage among confidence-building, human

rights, fundamental freedoms and humanitarian concerns, destined to remain a permanent feature of subsequent security and arms control treaties.

Though the Charter of the United Nations represented in many ways as a precursor, it can be stated that the CSCE, all along its life, definitely consolidated and defined the concept of comprehensive security. The Vienna Follow-up Meeting and the subsequent Paris Summit Meeting in 1990, as well as the Helsinki Follow-up Meeting in 1992, were the main stepping stones of an institutional growth ending with the setting-up of a full-fledged organization, the OCSE.

New challenges and new tasks confront the latter, compared with the momentous development of the earlier process. As dynamic as that was, also given its political background, the present Vienna organization in a way fulfils a more static, although still important, role, as seen from the view-point of international law. In accompanying the end of an era of global confrontation and radical division in Europe, the CSCE – it has been inspiringly commented – was as much an instrument of change as a result of changing realities.

In this respect, and despite its regional dimension, it still represents a major, if not the main, example of an evolving international instrument through its planned schedule of periodical reviews and the ensuing peaceful change it brought along in inter-State relations. Not a few of its features – but also its limitations - recur also in the different, but in many ways, connected category of legally binding treaties, including the Chemical Weapons Convention. CSCE history suggests that politically binding agreements are no less likely to be implemented then legally binding instruments under treaty law; while one can assume that the latter in many cases are no less likely to be disregarded by way of circumvention.

Obviously the category of review conferences both originally scheduled and on request, cannot be assimilated to the different category of conferences convened with the task of amending either in part or in *toto* legal agreements and treaties. Evidently those present different modalities and requirements: to start with their objective is the modification of their provisions and subsequently a ratification process by either all or a defined number of parties is necessary in order to enter into force. Instead review conferences are meant to check the implementation of politically binding provisions and the respect of their spirit and preambular framework.

It is difficult to assess the impact of review conferences in general. Against the comparative success of the CSCE process, more recent instances add up to a mixed experience. The unsavouring conclusion of the 3rd Review Conference of the CFE Treaty and following crisis, the regular development of the first CWC Review Conferences, the up and down trends of the General Assembly of the United Nations, show diverging patterns. The reference to the latter may not seem formally correct; however, the annual congregation of the representatives of all countries of the world, often of the highest political level, takes place on an agenda consolidated in time. As a matter of fact, its textual results may often look somewhat repetitive, concerning around two hundred issues and consisting of as many resolutions intended to review their progress and advance the implementation of the respective provision.

In substance the run of UNGAs is quite similar to that of review meetings of security and arms control agreements. Likewise, they resent the political climate of the juncture in time when they take place, a political climate that can be conducive to significant achievements, but more often to inconclusive deliberations. For this reason an overall reform of its mechanisms and organs has long been unsuccessfully advocated in order to achieve greater effectiveness with savings of financial and human resources. As a result, the subject of the effectiveness of the General Assembly continues to feed an unending debate among member States, divided as to its substance.

As it has been stated, the main scope of reviews conferences is the evaluation of progress in the implementation of the originating agreements, the assessment of possible breaches following investigation and detection by organs deputed to that task or/and individual member States, the possible updating of secondary provisions aimed at ensuring compliance.

Additionally, the dialogue itself among the Parties has a confidence building property in the field, or the fields, of the agreement even before and independently from the specific measures devised for that task. Once again the parallel with the General Assembly holds the ground: despite sometimes violent divisions on a number of issues of the agenda, there is no doubt that the UNGA fulfils the role of an unparalleled stage where, particularly smaller States, but not only them, can gain a useful insight of global and

regional political trends. A better knowledge yields normally an increased degree of confidence.

Neither should we underestimate the somewhat deterring impact of periodical treaty reviews. Although not formally stipulated in the textual provisions, the threat of sanctioning, at least in the case of violations threatening the system established by the original agreement, is implicit in the process of periodical re-examinations. Furthermore, in some cases a review represents a useful instance to focus and better appraise the political and logical connection between different treaty regimes and between regional and global ones, principally with the United Nations system. The latter features tend to be enhanced when review of implementation and negotiation of new clauses of an international pact are combined together in a single conference: a frequent case in the context of treaty evolution.

In the end, the contribution of the technique of periodical reviews to the advancement of international political and legal order gives rise to different evaluations among observers of world trends. It is undeniable that such method is a barrier against the erosion of treaty regimes, thus rendering a principle service in favour of stability, legality and all those public goods enshrined in the stipulations of treaties.

However, not a few experts argue that in fact seldom reviewing processes fully satisfy their evolutive role. From the intricacies and technicalities of the multilateral debate it ensues that their output, in the form of extensive concluding documents, lacks the pregnancy of the original agreements. It appears more often than not static, somewhat sterile and the result of too many political and lexical compromises, prompted by a diminished sense of urgency.

Allow me to end this presentation on a light note by recalling an episode going back to 1990 right at the end of the Vienna CSCE Review Meeting. In front of a text fully, if not yet formally agreed, forty-eight hours prior to the deadline, a brilliant French diplomat, now retired Ambassador Pierre Morel, after pressing instructions of President Mitterrand had to advance a not irrelevant demand as a condition for acceptance. "*Le President*" had decided at the last minute that France was to obtain the creation of a new body in the form of a "*Collège de Hautes Personnalités Internationales* " in the field of human rights.

A vivacious debate ensued, mostly in English and lasting twenty-four hours without interruption, on the appropriateness and timeliness of such a proposal. In the end,

and for the sake of reaching an agreed conclusion, the other delegations gave up their reservations provided that an adequate label be devised to describe such a body: a label susceptible to hint to its degree of relevance and outreach. "*College*" was immediately refused because of its inconsistency in the English language, "Committee"for being too operational, likewise "Group" as too generic and "List " as too inclusive.

As a last resort it was agreed that the word "Roster" would have satisfied everybody, the politically demanding French as well as the etymologically supercilious English. Once the concluding document had been formalised, inspired by naïve curiosity, somebody asked Pierre Morel how this would translate in French: the serendipitous answer was "*Mais naturellement Collège*".

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Thank you very much chairman. Thank you very much for inviting me. I would like to make a few comments from the perspective of general public international law as to the politics of Review Conferences. I will briefly address the legal basis of such conferences; I will address powers and limitations of such conferences, and I will finally say a few words on the confidence building effect of Review Conferences.

Before I start, let me, by way of introduction; point out a few general patterns. Review Conferences have become an important routine pattern, not just in the context of arms control, we have just heard that, but also in other areas wherever we find multilateral treaty regimes. That is the typical context for a Review Conference. So we find Review Conferences today, in particular, in the field of arms control and security matters, but we also find Review Conferences in the field of multilateral environmental agreements or in the context of international trade agreements and others. Review Conferences are normally not self-standing; they are normally attached to the plenary organ of such a regime, whatever the plenary organ is. In the context of multilateral arms control treaties, we normally find Conferences of the Parties. Such Review Conferences have a specific mandate that has to be distinguished from the general mandate of the Conference of the Parties, but one might argue that they enjoy authority because they represent the masters of the Treaty. We know this language very well from the context of the European integration process where we talk about the masters of the Treaty and the masters of the Treaty obviously play a special role in this context. Review Conferences may, and that is probably particularly important today, not only draw attention to the subject matter of the regime, but they may also reaffirm the object and purpose of the regime. This is particularly important in the context where multilateral arms control and disarmament have come under pressure for various reasons. So Review Conferences may also contribute to considering existing multilateral regimes as living instruments. This language, which is taken from the human rights context, is very important because if we do not continue to

work on such multilateral regimes, they may fall into oblivion or States may just treat things as a matter of routine, which is dangerous in security context. Now if we briefly look into the Chemical Weapons Convention and the legal basis for Review Conferences, we will find that indeed the relevant paragraph is attached to the provision on the Conference of the Parties. This paragraph is relatively simple and not very detailed, even though it is several sentences long. It only sets down the time frame for such conferences and it actually includes a brief mandate for Review Conferences. Review Conferences, and I will briefly cite this part of the mandate, are to undertake reviews of the operations of the Treaty, of the Convention, and thereby they are to take into account any relevant scientific and technological developments. I think this combination of looking at the operation of the Convention plus looking in particular at the scientific and technological developments also tells us something about the competences and powers and also about the limitations of Review Conferences, and I will address this now as a second matter.

If we look at competences and powers of such Review Conferences, it is obviously one first step to look at those powers that have been explicitly laid down in the Treaty and which I have just cited. You may recall that the First Review Conference also had a special entitlement in the verification annex which focused on the role of the First Review Conference where we actually had a re-examination "*in the light of a comprehensive review of the overall verification regime for the chemical industry on the basis of the experience gained*". I think this is important because in the context of the First Review Conference, the Conference was also called upon "*that it should make recommendations so as to improve the effectiveness of the verification regime*". Now this is, one might say, a continuing obligation which must be taken into account as a legal basis also for further Review Conferences. Now looking beyond the Treaty text, I think that it is important that a Review Conference still remains a Conference of the Parties. So the Review Conference enjoys the same powers which the Conference of the Parties also enjoys. So we have, in that sense, a specific entitlement for the Review Conference, which is laid down in paragraph 22 of Article 8 of the Chemical Weapons Convention plus the regular powers of the Conference of the Parties. Looking beyond that, there are also powers attached to the masters of the Treaty. It then becomes difficult to distinguish review from revision because distinguishing review from revision must, somehow, be a matter of limiting the powers of the Conference of the

Parties in the context of a Review Conference. Nevertheless, masters of the Treaty are entitled to further develop the Treaty. It is necessary here to distinguish between interpretation and amendment. The powers in the further development of the Treaty, in the context of a Review Conference, primarily focus on the powers to interpret the Treaty because we have special provisions related to Treaty amendment.

Finally and this again relates back to the powers laid down specifically in the Treaty, there is an assessment of an evaluation power of the Review Conference. This, I would argue, goes beyond the powers explicitly laid down in paragraph 22 because it also includes a general overall assessment with regard to the general political context of the Convention and I will come back to that in a minute. There are certain limitations which we should bear in mind; a Review Conference generally cannot go beyond the general provisions and scope of the Treaty. So the Review Conference is limited to this scope and we should also bear in mind the object and purpose of the Treaty as laid down in the preamble. Other powers laid down in the Treaty must be borne in mind to delineate the powers of the Review Conference. I mentioned amendment procedures which have to be separated but also the balance of power between the Treaty organs has to be kept in mind. The Review Conference is not competent to decide everything. Limitations also stem from the outside. There are relationships to other applicable instruments and regimes and this will be particularly important when we turn to the third session today, when it comes to international humanitarian law (IHL), because the Convention is not a self-standing instrument with regard to IHL even though it specifically addresses the non-use of chemical weapons. Also, and this is probably an increasing burden upon multilateral arms control treaties, we have to carefully look at the relationship with regards to the United Nations, and in particular the United Nations Security Council, taking into account Resolution 1540 which obviously raises problems as far as its relationship with multilateral arms control policies is concerned. I would argue it is not so much a problem of multilateral arms control law, because we have specific rules there. Article 103 of the United Nations Charter is one of the aspects that might be taken into account here, but nevertheless, in terms of arms control policies, Resolution 1540 poses its problems with regard to the Chemical Weapons Convention. Turning to a political assessment of what Review Conferences can actually do, the general approach typically is taking stock and looking

ahead. That was actually the title of a comment on the First Review Conference by Alexander Keller. If you look at a Review Conference generally as an instrument of public international law, you actually find that there is a legal and political evaluation of the behaviour of relevant actors. We found a particular problem today that was mentioned earlier, namely non-State actors, in particular terrorists. Terrorism has not become a generally new issue on the agenda, but it has to be taken into account when we talk about legal and political evaluation of the behaviour of actors. Assessment and evaluation of the functioning of the multilateral regime is obviously, particularly from the perspective of international law, an important matter and one might argue that moving towards what is sometimes called secondary legislation, legislation based on the entitlements that are included in the Treaty instead of formal amendments, may be an important aspect of a Review Conference.

Finally, strengthening the interface with other regimes, I already mentioned international humanitarian law, is an important aspect. From a policy perspective, Review Conferences, and I hope this will be in particular the case for the Second Review Conference, can highlight the regime as such. I think a number of politicians have become used to the existence of chemical weapons, they are pleased with the success of the OPCW but they do not care much about any progress which needs to be done. It is true that specialists actually are very concerned about progress to be achieved but the Review Conference has the potential to place this on the agenda of general politics in national parliaments. I think this is important: not just national governments but also parliaments should be aware of this issue. Second, it helps to provide enhanced authority to the Conference of the Parties at the plenary organ and it is not just the ordinary conference meeting, but it is the Review Conference, so it may benefit from enhanced authority. It may initiate political processes towards strengthening the Convention and finally it has a general rather than an individualist evaluation approach. This is important because the Review Conference should not focus on naming and shaming, but it should look into the general aspects.

By way of conclusion, let me stress that the Review Conference has a confidence building measure; it is an important instrument in the process of the further development of the Chemical Weapons Convention regime. Let me recall that it has a broad mandate.

The operation of the Treaty, as Article 8 paragraph 22 mentions, opens a broad variety of issues that may be taken up. I would consider the explicit reference to scientific and technological developments as only an exemplary reference not preventing the Review Conference from taking up other developments than scientific and technological, and that is hopefully what will happen. In this way, the Review Conference can be a tool to promote interpretation and application of the Conference and thereby establish the contribution of the CWC regime towards arms control which eventually is nothing but a confidence building measure.

Thank you very much.

Serge SUR

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A COMPARISON BETWEEN NPT, BWC AND CWC PROVISIONS AND PRACTICES

Next April, the Second Review Conference of the Chemical Weapons Convention will take place. Such a process is routine, in some respects, for all multilateral agreements devoted to the prohibition or non proliferation of weapons of mass destruction – prohibition as far as biological or chemical weapons are concerned, non proliferation for nuclear armaments. The Review Conferences' technique is not unusual in the multilateral field, and it is possible to find them in a majority of arms control multilateral conventions. But, for the sake of our seminar, I think that the comparison is most pertinent between these three conventions devoted to WMD. Forget about the CTBT, or Comprehensive Test Ban Treaty on nuclear weapons, as it is not in force, and most probably, will never be enforced. And there is no such review conference in the Moscow Treaty, or PTBT (Partial Test Ban Treaty), which belongs to another age of arms control, a sort of primitive age, without any kind of follow-up on collective mechanisms.

A comparison between the processes of these review conferences helps to define and to understand the meaning and the very concept of "review", which is also enlighted by their practice. In this respect, I would like to make three series of remarks. In the first one, we will recall the provisions of the three conventions, in order to show their specificities as well as their common ground. The second series will deal with procedural matters, which are always important to clarify the scope of conventional mechanisms. The reviews' procedures are indeed specific to each convention, but they are close enough to consider the review process as a common character of this kind of treaties, an enrichment of the international law of treaties, even if it is not envisioned in the Vienna Convention on the Treaty Law of 1969. But, at the same time, if the procedures are close, the processes retain specific meanings in each of these treaties, even if they share similar functions, because

their meaning and practice depend upon the context and the content of each of them, of their legal structure and of the content of their provisions. That will be the subject of a third set of remarks. So, firstly, the texts, secondly, the proximity of the procedures, and thirdly, the peculiarity of the processes – showing the very flexibility of the concept of review itself.

Provisions regarding the review conferences of the WMD non proliferation and/or elimination multilateral agreements

In each of our three conventions, we find specific dispositions pertaining to the review conferences, and their wording, even if it is slightly different, is close.

Take the first one, the Non-Proliferation Treaty (NPT), of 1968, Art. VIII, § 3: "*Five years after the entry into force of this Treaty a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realised. At intervals of five years thereafter, a majority of the Parties to the Treaty may obtain, by submitting a proposal to this effect to the Depositary Governments, the convening of further conferences with the same objectives of reviewing the operation of the Treaty*".

Let's have a look at the second one now, the Biological Weapons Convention (BWC), of 1972, art. 12: "*Five years after the entry into force of this Convention, or earlier if it is requested by a majority of Parties to the Convention by submitting a proposal to this effect to the depositary Governments, a conference of States Parties to the Convention shall be held in Geneva, Switzerland, to review the operation of the Convention, with a view to assuring that the purposes of the preamble and the provisions of the Convention, including the provisions concerning negotiations on chemical weapons, are being realized. Such review shall take into account any new scientific and technological developments relevant to the Convention*".

Then the Chemical Weapons Convention (CWC), Art 8, § 22: " *The Conference* [meaning of the States Parties] *shall not later than one year after the expiry of the fifth and the tenth year after the entry into force of this convention, and at such other times within that time period as may be decided upon, convene in special sessions to undertake reviews of the operation of this convention. Such reviews shall take into account any relevant scientific and technological developments. At intervals of five years thereafter, unless otherwise decided upon, further sessions of the Conference shall be convened with the same objective*".

Proximity of procedures: the way to institutionalization

In this respect, and considering written rules as well as practice, let us deal with their rules of convening, with their regularity, their participation, their preparation and their specificity regarding the amendment or revision procedures. Given the time allowed to this presentation, we will not look into all the details to the differences between the conventions. A close examination would certainly lead to more nuances and even to more stringent differences between the various processes. I would like to limit these remarks to a general and comprehensive overview. What we can conclude in short of this examination is that there is a kind of institutionalization of the review process, as a common element of the implementation of the conventions. Such an institutionalization is in itself a success, for the conventions, as well as for the very specific concept of review, distinct from, for instance, amendment or revision process.

(a) *Convening of review conferences*: In the three conventions, there is the same initial provision, foreseeing a review conference five years after their entry into force. Indeed, some specificities remain: there is automaticity in the NPT, as well as the BWC, but not in the CWC: a review conference has to be held, but within a deadline between five and ten years, depending upon the convenience of the Conference of State Parties, which is an institutional body of the Convention. After this first review conference, which anyway is compulsory in the three conventions, the possibility of organizing other conferences is opened, although not compulsory: it has to be asked for a majority of States Parties in the NPT, and one could question the right to the Depositary Governments – United Kingdom, United States, Soviet Union and nowadays Russia – to turn it down. Politically, it would be very difficult, but legally the question is more dubious. For the BWC, nothing in Art.12 provides for another review conference than the initial one. In the CWC, the process is still different: in principle review conferences should be held every five years, but it could be decided otherwise, apparently by the Conference of States Parties.

We could have a close look at these procedural differences, and try to explain them. But it is more important, in my view, to observe that, in practice, review conferences are convened and organized in the three conventions every five years, without any difficulty: it means that they are kind of institutionalized, a regular element of the implementation

process of the conventions. Omission or refusal to hold every five years such a conference would indeed mean or provoke a serious crisis for the treaty itself, putting its very existence at stake. But, as we will see, the convening of the conference does not mean that they will be successful.

(b) *Participation to the review conferences*: if we remember the text of the three treaties, we can observe that the participation is in principle limited to the States Parties – to all of them, without any discrimination, but only to them. Nevertheless, practice is different: in fact, signatories are generally invited, and even sometimes non signatory States, both as observers. The meaning of this practice is clear: as these conventions are dealing with general interests of the international community, and not only of the Parties, it is a kind of confidence building measure to invite them; and as these treaties are in fact open to a universal participation of States. It is also a way to compensate for their lack of actual universality, and even to pave the way for, to facilitate the participation of other States in the future, by showing that the door is opened, and that there is transparency in the operations of the conventions.

(c) *Preparation of the review conferences*: Indeed they are closely prepared, by preparatory committees. They discuss the agenda, which is both procedural and substantial; they even envision the final declaration which is the ordinary result of a successful review conference. It means that it is a kind of permanent process, because between two conferences, the preparatory committees are considering the follow-up of the previous one, and undertaking to identify the scope of the next one. In part, the review conferences are a permanent process. This could lead to a bureaucratization of the procedure, because this task is performed by civil servants, by diplomats rather than political leaders. This technical aspect of the preparation is particularly striking in the CWC, because there is an international organization in this treaty, the OPCW, with a technical secretariat largely involved in the preparation process. As for the European Union, there is a specific process for establishing common positions of the member States, which is both bureaucratic and political, in case all the members are Parties to the Convention. For instance, the Council has adopted, in July 2007, a Common Position on the 2008 Review Conference of the CWC.

(d) In any case, *review conferences* are clearly *distinct from amendments or revisions*. In principle, revision conferences could allow the identifying of the limits and the loopholes of a treaty, and help to define in what respect they should be amended. But all these treaties contain specific provisions, which are different for each of them. Art. VIII § 1 and 2 for the NPT, with a rather complicated mechanism that grants a specific status to nuclear States Parties and to members of the Board of Governors of the Vienna Agency. Such discrimination does not exist in the BWC, and all the Parties are treated along the same rules by its Art. 11. As for the CWC, Art. XV provides a very complex mechanism, with no discrimination among the Parties, but with the view of making very difficult, even impossible, any modification of a treaty that is already very complex and technical in itself. In practice, we know that there was no modification in any of these treaties. So the amendment or revision procedures are kind of dormitory provisions. It is another difference with the review conferences, which are very vivid and mobilize actively the State Parties on a regular basis. They are a regular, even a permanent part of the life of the conventions. But for what purposes? For what functions? We will try to deal with that in a third set of remarks.

Functions of the Review process: Similarities and specificities in the WMD multilateral agreements

The discussions and negotiations of the review conferences should lead to an agreed final declaration, or document, or text. The meaning of the agreement would be undermined if there were no consensus. Anyway, it has a political meaning, given the fact that these final declarations are not legally binding. At least they are part of the common practice of the Parties, and in this respect could be used for the interpretation of the treaties, as relevant elements to establish the common will of the Parties, according to Art. 31 of the Vienna Convention on the Law of Treaties. But in this set of remarks I would like to deal not so much with the legal aspects of the functions of review conferences, than with the legal policies, or the legal tools that they provide for the functioning of the treaties at stake.

One could identify a lot of various functions, some of them obvious, some of them more implicit, and even not yet conceived when the treaties were negotiated. I will only dwell on four of them, trying to illustrate how they get a specific meaning with each treaty,

due to its structure, its commitments, and /or its political context: implementation; accountability; verification; disputes. They enlighten the concept of review, distinct from other processes related to international treaty law.

(a) Let's begin with the *implementation process*. That is the more visible function, clearly common to our three treaties. Not only the conferences help to assess collectively the current implementation of their commitments by the Parties, but they could also help to correct inadequate undertakings, and foresee further developments for a better implementation. What is important is that this process is a collective one, leading to discussions and comparisons between the Parties, allowing also for some of them to give assistance to others. In the ordinary way of implementing a treaty, every Party has full liberty to apply it according to its own procedures, ways and means: with the review conferences, there are some kind of guidelines that could emerge for facilitating the process, and for unifying it. They could create active solidarity among Parties in order to reach the common goals of the treaty. At the same time, it helps to maintain the balance between the various provisions of the treaty. Some Parties could be more interested in some specific aspects of the treaty, while considering some others to be of secondary importance. For some others, it will be the opposite. For instance, in the CWC, some Parties consider the disarmament process as the main item, while some think it is the non proliferation aspect which should be the priority. In the collective process of review, the balance will have a chance to be considered and restored if necessary. It could even be pursued until the negotiation of another agreement, complementary to the treaty at stake. It is the case with the BWC, which includes in the review process the conclusion of a CWC convention, even if the current one was concluded on a very different basis.

It is quite clear that this function is less important when the treaties contain specific permanent institutional bodies for their implementation, as is the case with the CWC. It belongs to the Conference, to the Executive Council or to the Technical Secretariat to maintain permanently the treaty's implementation process. So the importance of the review conference is more to have a look forward, to take a general picture of the treaty, and also to have a look at the functioning of these bodies themselves.

(b) *Accountability*: this function seems already to be of an implicit nature, implied by the implementation process. Review conferences assume transparency from the Parties on

their activities pertaining to the treaty, and in some way make them accountable before the others. Common accountability applies, because in this respect the Parties are equal, and each of them could be asked to explain and justify the way in which it is implementing its commitments. Specific and collective procedures of accountability are not present in the relevant treaties. Obviously, there could be consultations among the Parties, at the bilateral, regional or even multilateral level, to assess their conduct – but the review process provides, on a regular basis, a tool for such an assessment and its discussion, which is an accountability of every Party before all the other Parties. This is a smooth means to establish an informal classification of the Parties: those who are willing and capable to fully implement the treaty; those who have difficulties to do so because of technical, financial or legal problems; those who are politically reluctant to implement their obligations. Such a classification is not a coercive one: it is different from the follow up, or implementation committees set forth by the UNSC in Resolutions 1373 or 1540, for instance, even if the relevant review conferences have to take these resolutions into consideration. The idea is always to look for a consensus, and to create solidarity among the Parties around the common goals of the treaty – which, after all, was freely accepted by them, which is not the case of the UNSC resolutions.

We can make the same observation that for the previous function with the CWC. In the regular sessions of the Conference, it is possible to find that kind of accountability. There is also, if compliance is at stake, a mechanism of rectification and of collective reactions if a Party does not implement correctly the treaty, provided for in Art. 12 of the Convention. But, before getting to that coercive approach, and in case of persistent difficulties, the review conference could help to build a collective persuasion against Parties who are slow to act in accordance with their commitments.

(c) *Review and Verification*: in some respect, verification is close to accountability. But with a deeper look, the two processes are very different. In short, accountability is provided for by the accountable Parties themselves, and verification is undertaken by the other Parties. Accountability, at least the implicit accountability provided by the review conferences, is not organized. It is limited to the information given by the Parties, or obtained by them through national technical means. A verification process supposes formal procedures of monitoring or surveillance on one hand, and a legal assessment of

compliance or non compliance on the other hand. In the NPT for instance, which does not content a specific process of verification, there is an indirect mechanism for the non nuclear States with the safeguards agreements concluded with the Vienna Agency. In case of dubious activities, it is clear that the review conferences are of little help in resolving the situation. In the CWC, on the contrary, there is a very elaborated and stringent mechanism of verification, which some Parties consider as even too intrusive. The result is the same: the review conference may help to assess the effectiveness of this verification mechanism and of its practice, but not resolve specific difficulties or implement a verification process by itself.

In the field of verification, there is a notable specificity of the BWC: We know that in this treaty, there are no efficient provisions for verification. It is a real problem, because the threat of biological weapons is growing, and that it is very difficult to monitor and verify the activities of States, and of private firms, or non-State actors, in the biological field, given not only their private nature, but also the facility with which it is possible to develop such weapons in small factories, laboratories, even rooms. So the effectiveness of the Convention is at stake. The question of a protocol of verification was discussed in the review conferences, stressing another function of the review process, which is to help the development of new provisions for the implementation of a given treaty. But, as we know, it was not possible to obtain such a protocol, even if the negotiations were in progress, due to the American opposition, which had contradictory reasons : on the one hand, the US tend to consider that it is not possible to verify efficiently any disarmament or arms control treaty by international collective means; on the other hand, the US is reluctant to accept intrusive measures of verification, due to the constraints on private interests and to the risks of industrial espionage.

(d) *Review and Disputes*: this function is of a more ambiguous nature. In a way, review conferences may help to prevent the disputes from arising among the Parties. They are, as was stated before, a kind of confidence building measure, allowing the Parties to explain among themselves and to avoid, or even to resolve the nascent disputes before they come to a contentious nature. That is obviously a positive outcome of the process. On the other hand, a review conference may be a recipe, or a nest, for arising disputes. Some otherwise dormant oppositions about the main goals of the treaty, the interpretation of

some provisions, the practices of some Parties, will be raised and enhanced by the opportunity given to the Parties to explicit and sustain collectively, fully and publicly, their contrasting views. It is always the case in practice, because a treaty, like a contract, is always a compromise between different interests, even between opposite views of the field covered by its provisions. In the field of disarmament and arms control, a clear and simple opposition is permanent between the haves and the have nots, or more deeply between those Parties who have or could have the prohibited weapons, techniques and material, and those who do not have and cannot obtain by themselves such weapons, techniques and material.

This opposition is particularly striking in the field of nuclear weapons. It is increased by the asymmetric nature of the provisions of the NPT. Nuclear weaponized Parties are not obliged to eliminate them, at least in any given deadline, while the non nuclear weaponized Parties are prohibited immediately and unconditionally to never build or obtain them by any means whatsoever. They resent it as discrimination, reinforced by the difficulties for them to develop the civilian uses of the nuclear energy. So the two main objectives of the NPT, nuclear disarmament on the one hand, non proliferation on the other hand, seem irreconcilable. The result is to transform the review conferences in a kind of battlefield between the haves and the have nots. In this context, the two last review conferences of the NPT were unable to find a common ground for a final declaration. In a way, its review conferences are a torture, an ordeal for the NPT, showing its shortcomings and contributing to injure it, instead of reinforcing it.

It is not the case for the two other ones, the BWC and the CWC. They are indeed less conflicting. But there are still differences between them. In the biological field, the review conferences were not able, it is true, to develop the treaty and to concretely improve its efficiency. They were or are kind of neutral in this respect. At least, they do not weaken it. As for the CWC, the review conferences are probably less important, given the permanent apparatus and the institutional mechanism for its implementation, verification, settlement of disputes and enforcement through sanctions set forth in the treaty. Nevertheless, its review conferences are not marginal: they play the part of a periodical and specific *rendez-vous* for the Parties. Their purpose and result is as least threefold : to assess solemnly the importance of the treaty; to allow the Parties, not only to evaluate their own

implementation, but also the functioning of the treaty as a whole, of its organs, of its verification procedures; to establish guidelines for the five years to come, in order to facilitate a common interpretation and application of its provisions, and to improve solidarity among the Parties in the pursuance of their common goals as stated in the Convention itself.

Issues before the CWC Second Review Conference

Mario SICA

Coordinator for the Preparation of the CWC Second Review Conference,

Italian Ministry of Foreign Affairs, Rome

ISSUES BEFORE THE CWC SECOND REVIEW CONFERENCE

To most of the world's disarmament and non-proliferation community, the CWC appears to be a success story:

- 183 of the world's 195 States are Party to it, representing over 98% of the world's population; though any State which is outside the CWC regime is potentially a threat, none of the four "problem States" (Egypt, Israel, Syria and North Korea) that are deliberately staying outside can really block the process; so people can speak of near-universality;

- a comprehensive prohibition, comprising as it does development, production, acquisition, stockpiling, use and transfer of chemical weapons, bolstered by an all-encompassing prohibition, known to CWC devotees as the "General Purpose Criterion";

- a verification regime that is penetrating, extensive and serious, having carried out more than 2,700 inspections of chemical production plants, chemical weapons production, storage and destruction facilities, research laboratories, professionally and without incidents;

- a global destruction process which has destroyed to-date over 40% of existing stocks: less than expected, but nevertheless a process which is well on its rails and moving ahead.

All told an impressive record.

And yet, the speakers of this panel are surely going to tell us that there is no room for complacency. Full national implementation is far from being universal. Furthermore, unambiguous implementation needs unambiguous obligations. Unfortunately, the CWC regime remains full of ambiguities and grey areas, ranging from low concentrations to the criteria for import export registration figures, to the growing erosion of the borderline

between chemistry and biology and the consequent uncertainty about obligations to declare processes involving biology.

The list of ambiguities is rather long, and surely our speakers will want to add to it. Whether ambiguities are a ticking time-bomb which may potentially blow the CWC apart, or a slow decay that may undermine it, they can and must be done away with: and the Second Review Conference is the time to do it and to reaffirm the political will of the international community to provide an unambiguous interpretation to the CWC in all its parts.

Tea PEDRIN

Permanent Representative of Slovenia,

Organization for the Prohibition of Chemical Weapons (OPCW), The Hague

ADDRESS

Excellencies, Ladies and Gentlemen,

First I wish to thank you for the invitation to this Conference. It is a great honour for me to be here and to participate at this event.

Last year, we commemorated the 10th anniversary of the entry into force of the Chemical Weapons Convention, a cornerstone of multilateral disarmament and non-proliferation treaty regime. All EU Member States are States Parties to the CWC. It serves as a model for the EU's approach to disarmament and non-proliferation as a whole.

The EU Strategy against Proliferation of Weapons of Mass Destruction adopted in 2003, reaffirms the commitment of the European Union to the multilateral treaty system. It underlines the crucial role of the CWC and OPCW in creating a world free of chemical weapons. At the same time, it underlines the efforts to be taken concerning international security, disarmament and non-proliferation. OPCW in only 10 years of existence has achieved remarkable success in the faithful and effective discharge of the functions entrusted to it under the terms of the Convention. In this respect OPCW can well be considered as an example of effective multilateralism in the field of non-proliferation and disarmament.

EU, at the UN level, supports the work carried out by the 1540 Committee in outreach to those regions where the implementation of Resolution 1540 is most urgent. In our view, Resolutions 1540 (2004) and 1673 (2006) are fundamental for the development of an effective mechanism to prevent and counter the proliferation of weapons of mass destruction, their means of production and delivery to or from States and non-State actors worldwide. We will continue to urge all countries to fully implement these legally binding resolutions.

Tea PEDRIN

Permanent Representative of Slovenia,

Organization for the Prohibition of Chemical Weapons (OPCW), The Hague,

on behalf of the Slovenian President of the European Union

Excellencies, Ladies and Gentlemen,

The First Review Conference in particular assessed the destruction process of declared arsenals, took account of relevant scientific and technological developments, reviewed and re-examined the provisions of the Convention relating to verification in the chemical industry and provided strategic guidance for the next phase of the implementation of the CWC.

The Second Review Conference this April will be an opportunity to look ahead and examine the path trodden. We note that much of the work has been accomplished and much of it remains to be done. We continue to be encouraged by the unprecedented manner in which the international community has rallied to end the devastation caused by chemical weapons.

We look forward to contributing to the positive results of the Second Review Conference as a European Union Presidency, together with our EU partners. In June 2007, the European Union endorsed the Common Position for the Conference and we will follow the guidelines contained in this document.

The European Union will strive to strengthen the Convention in particular by promoting compliance with the CWC, including effective national implementation, taking the full account of the General Purpose Criterion. Timely destruction of all chemical weapons, the enhancing of the verification regime and striving for universality are also the main objectives of the European Union for the Second Review Conference.

Experience has shown that the task of eliminating the legacy of chemical weapons stocks has proven to be a greater challenge than anticipated. Full and timely implementation of the requirements of Articles IV and V is a key EU priority.

The European Union will also promote further strengthening of the verification regime with regard to activities not prohibited under the Convention, with a view to

enhancing confidence in the non-proliferation of chemical weapons and to further promoting cooperation with industry. The European Union supports the verification regime of a more relevant and focused OCPF inspection base to select from, by the Technical Secretariat of the OPCW, and the improvement of declarations by States Parties on OCPF sites, which will also ease the burden of inspections. Challenge inspections remain to be an indispensable and available instrument of the OPCW verification regime. States Parties have the legal right to request a Challenge Inspection, without prior consultation, while the OPCW has to be prepared to implement a challenge inspection should it be requested to do so.

The CWC has come close to universal membership with an increase in the States Parties from 88 to 183 within the last decade. I would like to particularly emphasize the importance of the universality and effective national implementation of the Convention. The Slovenian Presidency will continue to encourage all States that are not Parties, to ratify or accede to the Convention without delay. We will urge States Parties which have not yet provided information about the designation of their national authorities and the steps taken to enact legislation to do so as a matter of urgency. Full compliance with Article VII is a vital factor for the present and future efficiency of the CWC regime. The European Union will support the continuous improvement of national implementation measures through the strengthening of national export controls, required to prevent the acquisition of chemical weapons, and providing assistance to States Parties in need, as is exemplified by the Joint Actions of the European Union.

As universality is the success story of the CWC, the present situation of national implementation is less satisfactory. Only 78 States Parties are fully implementing the Convention, 16 States Parties have not started the implementation process, and eight of them don't have a designated National Authority. National implementation should remain a top priority of the OPCW, especially with a view to the scientific and technological developments. States Parties have the obligation to reflect the General Purpose Criterion in their national implementation legislation and administrative enforcement practice. That means, that the States must penalise all activities prohibited under the CWC involving the use of toxic chemicals or their precursors, beyond those listed in the Schedules of chemicals

in the Convention. Effective and comprehensive national implementation is equally important for all countries.

The European Union will also support ensuring the OPCW's capability to provide assistance and protection, and fostering international cooperation in accordance with the provisions of the Convention, in particular contributing to capacity building activities by the OPCW in States Parties developing their chemical industry and trade.

The European Union is also convinced that we have to begin the work to ensure that after the completion of the destruction of chemical weapons, the OPCW can focus on its remaining activities, in particular its non-proliferation role.

Excellencies, Ladies and Gentlemen,

In fulfilling its responsibility to the international community, the EU plays an active and visible role in supporting the OPCW to achieve the disarmament and non-proliferation goals of the CWC.

The European Union's ongoing commitment towards the OPCW is highlighted in the development of the European Union Joint Actions in support of OPCW activities, which are developed in the framework of the EU Strategy against Proliferation of Weapons of Mass Destruction.

On 22 November 2004 the Council of the European Union adopted the first Joint Action on support for OPCW activities in the framework of the implementation of the EU Strategy against the Proliferation of Weapons of Mass Destruction. This Joint Action has been followed by Joint Action 2005, adopted on 12 December 2005 and Joint Action 2007, adopted on 19 March 2007.

The Joint Actions of the European Union in support of OPCW activities are one of the most prominent elements of the EU's continuous engagement with the Organisation.

The 2007 EU Joint Action is the third consecutive voluntary contribution by the EU to the OPCW. The Joint Action comprises results-driven projects to promote the universality of the CWC, support the CWC's full and effective national implementation, and enhance international cooperation in the peaceful uses of chemistry. The 2007 EU Joint Action will provide the OPCW 1,700,000 euros in project funding.

The European Union is looking forward to further cooperate with the OPCW, on the basis of the positive evaluations of the previous Joint Actions. We remain committed to

further support the full implementation of the Chemical Weapons Convention in its mandate for disarmament and non-proliferation, and to the successful outcome of the Second Review Conference.

Thank you for your attention.

Sergey BATSANOV

Director, Geneva Office, Pugwash Conferences on Science and World Affairs, Geneva

First, I thought I would start by telling you that I'm prepared to help you in your duties of chairman. I have just set my alarm clock to ring in ten minutes time. I must say, moving on, and thank you for the introduction, that it's a pleasure to work under your chairmanship, and you have also devoted so much time on the Chemical Weapons Convention and building bilateral relations between Italy and Russia in the area of the implementation of the Chemical Weapons Conventions.

Now the task that I am facing is rather difficult, I must say, because a number of, if not all, the important substance of the issues before the Conference have already been addressed by Director General Pfirter, by other speakers and you, as well, in your introduction. What is also important, of course, is that there have been several national papers and group of papers submitted to the opening and the working group, which is working to prepare the Conference, notably from the US, UK, Japan, a joint paper from the European Union and a group paper from non-aligned plus China. Of course, what this list is also saying is that perhaps the input from other nations which are not covered in this way or another may not be so active and important. Anyway, almost all the material that the session needs to address is on the table. The opening and the working group is in the process of preparing drafts for final documents of declaration so the work is in full swing, as the Conference will take place in just a bit more than one and a half months.

I will talk about two categories of issues and do it in a schematic way, in order to avoid repetition. One more specific issue, which is one of the of the serious problems, is the state of destruction. I think that the non-aligned and Chinese paper contains a very good point that, at this moment, we should not concentrate on how to find an escape clause for not fulfilling the final deadline of April 2012, as Director General Pfirter also mentioned. I would add to this only one other thing. It is important, while there is a need for a strong political message and pressure, that this issue should not be used at the same time to

distract attention from other problems which the implementation of the Chemical Weapons Convention faces and, of course, they should also be discussed seriously at the Conference.

Another point already mentioned by several speakers is the importance of the General Purpose Criterion, which is more than just national implementation, whose importance necessitates more than just a week or two to address developments in science and technology. I really hope that those in the position to do so will read the text of the Treaty very objectively and find a number of instances where it is very clearly said that chemical weapons are not only those based on scheduled chemicals, that chemical weapons production facilities are not only those where the fluids contain scheduled chemicals or other scheduled chemicals. It is absolutely clear from the Treaty, so this is not only a question for national implementing legislation, but there is a need to do more in industry verification, specifically OCPF. Unfortunately, there is a perception, and there were some references made to this, that the core discussion is to subject developing countries, including China because they made a joint paper, to more verification. I think it is important to try to somehow address this perception and this is more a question of sustainability of the Treaty, which is in everyone's interest. Perhaps some compromises need to be considered for example, in the areas relating to Arts. 10 and 11.

I think we are very close to reaching universality, also due to Universality Action Plans, but I find myself very much in agreement with what the EU paper submitted in The Hague says, that what we need now is rather specific well-designed strategies oriented to those difficult areas which we still have with regard to universality. I don't think we need any global plans anymore because those global plans have done the job and we are happy about that. We need those strategies, and I think that the EU is quite right to acknowledge that. Concerning national implementation, I think frankly that we will never arrive at 100% and we should not be afraid of saying so, not only because these are some problems in some countries but because it is a never ending process. The reality changes and there is a need for the adjustment of national laws. Certain national laws will become obsolete in terms of implementing the Treaty, so I think it is a process that requires constant attention and also bearing in mind the fact that good national implementation is a very strong addition to verification, to confidence and compliance and to the well-being of the Treaty in general.

This is about some specific issues, and I will now consider interdisciplinary issues. Definitely, partly due to negotiations, partly due to implementation of the Treaty, the risk of the use of chemical weapons in the traditional sense has gone down; even the armed forces of the big possessors, for example, now have difficulties finding experts who know how to design chemical weapons, how to produce chemical weapons and how to organize production facilities. However, other risks go up. One was mentioned: non-State actors. I would add another dimension to that: defence contractors. You may be aware of what happened also in Iraq, with Blackwater using riot control agents in a situation which was, apparently, not even riot control or law enforcement. I think that much more attention should be paid to that, not to mention the fact that the research on riot control and similar agents continues, that we have an offer from industry in some countries, producing these agents into modifications: one for use by police and another with a longer range for use by armed forces. This is a signal to think about. Can the Review Conference solve that? Probably not immediately, but I hope it can start some process of addressing this whole range of things, which all, by the way, have a rather close relationship to humanitarian law, as far as I am concerned, and not just with disarmament.

Concerning science and technology, Director General Pfirter referred to a disturbing moment. There are some countries which object even talking about science. I think that this really should be taken into account.

Before closing my presentation, I will add just one point perhaps. You often hear that one or another country or group of countries says that terrorism or international economic development (Art. 11) do not really belong to the OPCW tasks and that there are other organizations taking care of that. There are indeed other organizations and with this process of merging between chemistry and biology, other organizations also include World Health Organization, for example, or the recently created implementation support unit of the Biological Weapons Convention. The question is how to deal with the multiplicity of international organizations with different mandates that are slightly overlapping but still leave gaps. Again, the Review Conference cannot give a definite answer, but I think that it should ask the Executive Council or some regular conferences to address it very seriously.

Thank you so much.

Julian Perry ROBINSON
Director, Harvard Sussex Programme, University of Sussex, UK

Here is a view from within civil society of pitfalls in the way of progress towards a world free of chemical weapons. States Parties are about to assemble for their second five-yearly conference to review the operation of the Treaty that established obligations intended to create such a world. The destruction of weapons and associated infrastructure required under the Treaty is now nearing completion, but there remains the challenge of preventing a resurgence of chemical weapons under the influence of new utilities and other forms of value created by political change, by diffusing technology, and by advancing science. Impeding such governance is the need to accommodate divergent national interests, compounded by widespread ignorance or misunderstanding of issues involved, or heedlessness towards them. This is especially to be seen in the failure of a substantial majority of States Parties to incorporate into their implementing legislation the comprehensive nature of the prohibitions set forth in the treaty. It is also evident in the growing list of issues in the "too difficult to deal with" category. An important consequence is the creeping legitimization, or acceptance by default, of activities that ought to have been the subject of collective consultation among all States Parties. One example is the growing use for purposes of counterterrorism of chemical weapons that fall outside the category of 'weapons of mass destruction' but which are nevertheless chemical weapons in the sense of the treaty. A measure of the success of the impending Review Conference will be the mandate it establishes for the conduct of such consultations.

Introduction

The Organization for the Prohibition of Chemical Weapons (OPCW) has now existed for a decade, functioning largely as intended. A world free of chemical weapons (CW) no longer seems unattainable. This essay is about the well-being of the Treaty that established the OPCW – the 1993 Chemical Weapons Convention (CWC) – as the CW stockpiles and factories around the world pass into destruction or conversion. There are two themes. One is that, in the absence of effective measures of technology governance,

resurgent chemical weapons born out of 'dual use' technology will remain a possibility. Decisions are needed now on how the CWC should best be implemented so as to ensure that governance in the longer term. The second theme is the tension between principle and political expediency. This tension will continue to afflict the OPCW and may well increase once the elimination of stockpiles and factories that the Treaty requires is complete. The due-date for that is now 29 April 2012.[1]

People often point to the CWC as showing that the problem of chemical weapons has been solved. It has not. Nor will it be unless those two themes are properly understood. Now is the time for stocktaking, while the impending Second CWC Review Conference (7-18 April 2008) is obliging the OPCW to lift its sights further into the future than the press of day-to-day business normally allows. The CWC was conceived during the Cold War, and confronting it are serious challenges, in part a consequence of that tension between principle and practice and in part because of wider political and technological change. This essay seeks to characterize the main challenges and thus suggest possible measures of alleviation. Theory is not emphasized, but neither is it ignored: the central notion of 'technology governance regime', for example, comes from an emergent school of thought in which findings from technology studies are applied to arms control.[2]

Challenges to the Treaty

Chemical weapons entered the agenda of the world's multilateral disarmament negotiating body in 1968 alongside biological weapons (BW), to which they were, and remain, intimately related, impelled there by the Vietnam War. Quite quickly there came agreement to tackle BW first in preference to the joint treatment of chemical and biological weapons (CBW) that had characterized the 1925 Geneva Protocol prohibiting first use of CBW in war. The result was the 1972 Biological Weapons Convention (BWC). A counterpart CWC, whose continued negotiation "*in good faith*" was required under Article IX of the BWC, took a further twenty years.

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[1] This is the deadline approved by the OPCW Conference of the States Parties at its Eleventh Session, in December 2006. It extended an earlier deadline that was proving beyond the capacities of possessor States, as, indeed, may the new one also.

[2] See, further, Caitríona McLeish, "From disarmament to technology governance: the changing function of the Chemical Weapons Convention", a paper presented at the OPCW Academic Forum, The Hague, 18-19 September 2007.

When, on 3 September 1992, Ambassador Adolf Ritter von Wagner of Germany presented a draft CWC for the approval of the Conference on Disarmament (CD) in Geneva, he reiterated a point he had made often during his chairmanship that final year of the negotiating body, the CD Ad Hoc Committee on Chemical Weapons:

There is no precedent for this global, comprehensive and verifiable multilateral disarmament agreement. The draft convention provides for a cooperative, non-discriminatory legal instrument to eliminate the spectre of chemical warfare once and for all. The unique character of its contents is strengthened by the consistent application of two principles: overall balance and adaptability to future needs. Future States Parties are offered a balanced legal instrument providing clarity on the fundamental obligations and, at the same time, enough subtlety on matters of implementation so that, with the consent of States Parties, the respective provisions may still mature and evolve in the course of future practice.[3]

The draft treaty, he was telling the CD, was a delicate structure in which compromises – on six central matters: the scope of obligations, verification of compliance, safeguards, disarmament, executive procedures, and international cooperation in chemistry—were balanced against one another without, however, precluding from their future implementation any adaptation, if all States Parties agreed, to a changed environment. Potential Parties were, in effect, being invited to decide, through their domestic political processes, whether they would be better off inside that package of compromises than outside it, with an assurance that the terms of their engagement were not necessarily immutable.

One hundred and eighty-eight States have since signed up to this deal (as of end 2007), 183 of them as full Parties. The most conspicuous holdouts are Egypt, North Korea and Syria, which have not signed the Treaty, and Israel, which has signed but not ratified it. The assumption has to be that all four holdouts wish to maintain the option of chemical-warfare armament. Of the 183 States Parties, 12 have, as required by the Treaty, declared that they possessed factories for making CW at some time after 1945.[4]

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[3] Conference on Disarmament document CD/PV.635, 3 September 1992, p 8.

[4] The 12 declared possessors of former Chemical Weapons Production Facilities are Bosnia & Herzegovina, China, France, India, Iran, Japan, Libya, Russia, Serbia & Montenegro, South Korea, the UK and the USA. The

Of those twelve, five have also declared that they possessed stocks of the weapons at the time the CWC entered into force, as has one additional State Party that must presumably have imported the weapons rather than making them for itself. The combined declared stocks amounted to 71,365 tons of chemicals as of 30 April 2004 – mostly CW agents but also precursors.[5] Of that total, about 25,000 tonnes had been destroyed in accordance with the CWC by October 2007.

A working principle is this. Any development or change that causes a State to question its continuing adherence to the CWC would be a challenge to the Treaty. If major or many States were to start such questioning, the challenge would be serious, requiring a collective response if the Treaty were to remain in good order. For each State Party the constant question would be whether benefits flowing from the CWC regime continued to outweigh the attendant costs and to compensate for any penalties there might be to the national interest: are we still better off inside the regime than outside it? In fact there are few if any countries where the relevant decision-makers would address the matter in such abstract or holistic terms. Decision would, as always, be driven by bureaucratic and domestic politics, in other words by the competing interests that such politics serve to accommodate. The cost-benefit frame, however, provides those involved with a convenient and respectable language in which to debate and present the decision, and us to assess it. For this reason it is used here as a framing concept with which to specify the more important challenges to the CWC.

One set of challenges can be seen as primarily technological in character, being a consequence, mainly, of change in applicable science and technology. A second set is more obviously political. All of them have the potential to harm the CWC if no special effort is made to counter them. They are now discussed in turn under five successive headings: new

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Japanese declaration solely concerned the facility that had been built by Aum Shinrikyo, the cult responsible for the terrorist releases of sarin nerve-gas in Matsumoto in June 1994 and in the Tokyo subway in March 1995.

[5] *The CBW Conventions Bulletin* no. 64 (June 2004), pp 8-9, reporting data released by the OPCW Technical Secretariat. The 6 declared possessors of chemical-weapons stocks are Albania (declaring 16 tonnes of CW agents to the OPCW), India (1044 agent-tonnes, maybe somewhat more), Libya (24 agent-tonnes), Russia (40,000 agent-tonnes), South Korea (1056 agent-tonnes, maybe somewhat less) and the USA (27,800 agent-tonnes). Like the (China-supplied) Albanian holdings, whose destruction was completed in July 2007, the Libyan holdings appear far too small to have had much military significance, but Libya also declared that it possessed large tonnages of precursor chemicals – enough, it seems, to have made many hundreds of tonnes, even two or three thousand tonnes, of mustard and nerve gas. The amount of mustard and nerve gas used by Iraq during its 1980-88 war with Iran is believed to have totaled 2540 agent-tonnes. The UK had destroyed its cold-war stockpile of some 62,000 agent-tonnes well before the CWC had been agreed, as had other erstwhile possessors.

utilities for CW; proliferation of CW; accommodation of national interests; pernicious ignorance; and creeping legitimization.

New utilities for chemical weapons

Disarmament, especially disarmament of 'weapons of mass destruction' (WMD), is an objective widely seen as beneficial, but armament also can bring benefit, by contributing to security. Under some circumstances that benefit could conceivably extend to chemical-warfare armament, even though such armament would incur discouraging penalties because of the present strength of the international norm against it. Military options forgone through renunciation of chemical weapons could then be significant on the cost side of remaining within the CWC regime. Yet the taboo seemingly associated with chemical and other disease weapons appears to mean that most States are content with the disarmament required by the CWC -- except that circumstances may now be creating utilities for chemical weapons not previously considered or accessible.

At least three types of new utility can be discerned, and examples of all three seem evident in recent conflicts or in preparedness for them. The first is a consequence of wider changes in the nature of warfare, rather as the shift from 'massive retaliation' to 'limited war' doctrine towards the end of the 1950s elevated the status of chemical (and biological) weapons in Western military thinking, causing new utilities to be seen for them, especially in Third World settings. Today, a new type of organized violence is taking the place of those confrontations between highly disciplined and technologically advanced armed forces that characterized the later Cold War. Conflicts these past two decades in the Balkans, the Caucasus, the horn of Africa, Rwanda, Liberia, Sierra Leone, Angola, Sri Lanka, Afghanistan and post-invasion Iraq have eroded formerly clear distinctions between war, organized crime and large-scale violation of human rights. These new wars are fought by seeking political control through the displacement, or worse, of civilian populations and through the sowing of fear and hatred.[6] Because chemical weapons can lend themselves particularly effectively to such objectives, they may conceivably have a greater affinity to the new wars than they did to the old. So, notwithstanding the CWC, the weapons could have an

[6] See especially Mary Kaldor, *New & Old Wars: Organized Violence in a Global Era* (second edition, Cambridge: Polity, 2006).

expanding future. It is a future that seems already to have begun: instances of 'new' chemical warfare include episodes in Iraqi Kurdistan, in southern Africa, in Bosnia and perhaps in Chechnya.[7] This is reason why the most recent chemical warfare allegations, emanating from Sudanese, Israeli, Palestinian, Baluchi, Lebanese and US/Iraqi sources, should not remain uninvestigated and thus uncorroborated. Unresolved, a plethora of allegations could imply Treaty failure.

The CWC provides for a compliance-verification system run by an intergovernmental organization (the OPCW) having an international inspectorate that ought in principle to countervail this new-utility challenge. But the routines of that system were designed against Cold-War-period conceptions of utility, meaning that the lists of chemicals and types of industrial facility that the OPCW now has under its immediate surveillance are dictated by the types of chemical weapon that fitted old-war, not new-war, requirements. Basically that meant focusing on toxic chemicals that were so intensely aggressive in their effects that weapons disseminating them would be competitive, in quantitative casualty-producing terms or other such measures of tactical efficacy, with modern conventional weapons. Not a great many such toxicants exist,[8] so their coverage in the CWC schedules that govern routine OPCW verification allowed people to suppose that the main threats as then conceived had thereby been brought under control. In the new wars, however, it is not so much relative aggressivity that determines the value of chemical weapons but rather such other factors as accessibility or availability of the weapons and their terrorizing potential. A whole host of toxic industrial chemicals and other chemicals not hitherto regarded as CW agents might thus find application in new-war contexts, as, most recently, chlorine – that long-obsolete, by old-war standards, killer gas that was briefly weaponized during the First World War -- has done in Iraq. The fact that most of these chemicals are not listed in the CWC control schedules does not mean that their use for CW purposes is permitted, nor that the CWC is unavailing against them. It means only that, except perhaps for the still-undeveloped regime for other Chemical Production Facilities, the routine international verification procedures currently run by the

[7] UK House of Commons (session 1999-2000) Foreign Affairs Committee *Eighth Report: Weapons of Mass Destruction,* London: Stationery Office, 25 July 2000, pp 203-206, memorandum dated 17 February 2000 submitted by J. P. Perry Robinson.

[8] For discussion of this point, see J. P. Perry Robinson, "The chemical industry and chemical warfare disarmament: Categorizing chemicals for the purposes of the projected Chemical Weapons Convention", *SIPRI Chemical & Biological Warfare Studies* no. 4 (1986) pp 55-104.

OPCW in regard to industrial activities are not directed at them. In fact, any abuse of a toxic chemical for hostile purposes is totally outlawed by virtue of the comprehensive nature of the CWC's prohibitions as embodied in its so-called 'General Purpose Criterion' – those words in, for example, Article VI.2 of the Treaty that oblige the national authorities of States Parties to ensure that no toxic chemical within their territories, or in any other place under their jurisdiction or control, falls within the illegal realm of purposes prohibited by the Convention.[9] The challenge to the regime therefore lies in the degree to which such national controls may fail to exert a constraining effect. This, regrettably, is an area in which implementation of the CWC is weak. Only a small minority of CWC States Parties have yet implemented the General Purpose Criterion into their domestic law.

A second major source of new utility for chemical weapons is the propensity of knowledge newly gained in the life sciences for suggesting novel modes of attack that could be the basis for militarily or politically attractive new forms of weapon. For example, if a new molecule is discovered that can exert novel disabling effects on the human body at low dosage, attempts to weaponize it may well ensue. Albert Hofmann's discovery of LSD in 1943 is a case in point, although half a decade elapsed before weaponeers noticed. Or if a hitherto unknown molecular pathway serving a process of life comes to be identified, chemical agents capable of interfering with that pathway might also become identifiable and then form the basis for a novel weapon. Of course, many considerations other than novelty or intensity of effect determine the usefulness of a new weapon, so the new science is not itself the challenge to the regime that is here suggested. But it would be a step towards it; and many such can be envisaged.[10] This prospect is not necessarily remote. We should not, for example, disregard the statement reliably attributed to a "former high-level Defense Department official" commenting on the feasibility of US attack on Iranian underground facilities: "*We can do*

[9] CWC Article VI.2 opens thus: "*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*." Known to some as the *"Molander chapeau"*, this obligation prefaces the main provisions of the CWC for its industry control regime. The General Purpose Criterion is also set out in CWC Article II.1 (a), which states that all toxic chemicals and their precursors are chemical weapons within the meaning of the CWC's prohibitions "*except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes*".

[10] A particularly rich recent source of information on advances in technology that may be applicable to chemical as well as biological weapons is the Lemon-Relman report: Institute of Medicine and National Research Council of the US National Academies, Committee on Advances in Technology and the Prevention of Their Application to Next Generation Biowarfare Threats (Co-Chairs: Stanley M. Lemon and David A. Relman), *Globalization, Biosecurity, and the Future of the Life Sciences*, Washington, DC: The National Academies Press, 2006.

things on the ground, too, but it's difficult and very dangerous – put bad stuff in ventilator shafts and put them to sleep".[11] Again, it is the General Purpose Criterion as used in the CWC that is the international safeguard against this challenge. But it is a safeguard only if it can be activated, and this requires continual monitoring of scientific and technological change for any new development that might challenge the regime. This is a task, it should be noted here, that cannot reliably be left to security authorities or to international civil servants alone, simply because their surveillance of new science will always be insufficient. The scientific community at large must also be involved.[12]

A third type of novel utility now becoming manifest is the emerging role of chemical weapons, not in the hands of terrorists or other new-war aggressors as in the first novel utility considered above, but for purposes of counter-terrorism. This utility has demonstrably become a stimulus to rich-country questioning of the CWC.[13] It is rooted in past counter-insurgency applications of toxic chemicals, which reach back through the Vietnam War to British, French, Italian and Spanish use of toxic chemicals in colonial situations - a utility that the CWC was intended to suppress. Its re-emergence in counter-terrorist guise is to be seen in the proliferation of weapons based on Agent CR, evident each year in that part of the OPCW Annual Report addressing the declarations of 'riot control agents' required under CWC Article III 1(e), for the extreme aggressiveness and other properties of CR have caused it to be widely rejected as suited to civil police use. Police forces in the UK, for example, are equipped either with Agent CS or with PAVA for law-enforcement use, and, although the UK has also declared Agent CR to the OPCW as a 'riot control agent', it has issued the agent only to its military forces, for counterterrorism. The growing counterterrorist utility of chemical weapons is further evident in the vigorous advocacy to be heard in some quarters for the arming of counterterrorist forces with more advanced types of 'non lethal' toxic weapon. The readiness with which the US Marine

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[11] Seymour M. Hersh, "The Iran plans: would President Bush go to war to stop Tehran from getting the bomb?", *New Yorker*, 17 April 2006. It is not clear whether it was a literal or a euphemistic 'sleep' that was meant.
[12] This was a matter explored by the UK CWC National Authority Advisory Committee during the October 2001 Sussex workshop on the General Purpose Criterion. See *The CBW Conventions Bulletin* no. 55 (March 2002) pp 1-4.
[13] See, for example, the Foreword by USAF Lt-Gen Robert J. Elder, Jr, Commandant of the US Air War College, to N T Whitbred IV [Commander, USN], "Offensive Use of Chemical Technologies by US Special Operations Forces in the Global War on Terrorism: The Non-lethal Option", *The Maxwell Papers* [Maxwell Air Force Base, AL: Air War College] no. 37, July 2006, pp iii-iv.

Corps has taken to toxin weapons of this type – devices disseminating Agent OC[14] – seems indication of a trend. So, perhaps, is the absence of any serious criticism of the Russian government for having authorized use of toxic chemicals other than riot-control agents by the *Spetsnaz* forces that, on 26 October 2002, liberated 634 of the people taken hostage by Chechen separatists in a Moscow theatre. All but five of the other 129 hostages were killed by the toxicant used, which is said to have been an agent "based on derivatives of fentanyl" that had been developed by USSR special services.[15] Comparable in some respects, if very different in others, is a counterterrorist utility for toxic weapons that Israel, for example, has demonstrated in its espousal, following the Munich Olympics outrage in August 1972, of assassination as a major tool in counterterrorism.[16]

Perhaps exacerbating the new-utility challenge is the increasing dependence of some countries, not only on state forces for law enforcement including counterterrorism, but also on the private military contractors who have been providing security services at local, national and even global level. The potential value and, therefore, take-up of 'non lethal' chemical weapons by such contractors, who may be regulated less stringently than military or police forces, is already starting to become a matter of expressed concern.[17]

Proliferation of chemical weapons

Nowadays when people speak of the proliferation or non-proliferation of chemical weapons it is not always clear what they are talking about. In its normal usage, the word 'proliferation' conveys the sense that the weapons concerned continue to exist somewhere.

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[14] See the entry for 22 March 1996 in the News Chronology section of *The CBW Conventions Bulletin* no 32 (June 1996) p 27. Agent OC is a toxin in the sense of the 1972 Biological and Toxin Weapons Convention because it is a toxic substance produced by a living organism (chili-pepper plants): see World Health Organization, *Public Health Response to Biological and Chemical Weapons: WHO Guidance* (Geneva: WHO, 2004), p 216.

[15] A recent publication in the medical literature identifies the agent used – without, however, citing any authority for the information – as something called "*Kolokol-1 […] containing carfentanil*"; see James Geoghegan and Jeffrey L Tong, "Chemical warfare agents", *Continuing Education in Anaesthesia, Critical Care & Pain* vol. 6 no 6, (December 2006) pp 230-34.

[16] See Aaron J Klein, *Striking Back: The 1972 Munich Olympics Massacre and Israel's Deadly Response* (New York: Random House, 2005) pp 104-11 and, describing the assassination of Wadi Haddad in 1978 with "*a lethal biological poison … that attacked and debilitated his immune system*", pp 205-8. On the attempted CBW assassination of Khalid Mish'al, see the entries for 25 September 1997 and 19 February 1998 in the News Chronology sections of *The CBW Conventions Bulletin* no 38 (December 1997) p 29 and no 40 (June 1998) p 23. The CBW agent used in this latter episode is said to have been fentanyl, administered through the ear.

[17] See, for example, Alan Pearson, "Incapacitating biochemical weapons: science, technology, and policy for the 21st Century", *Nonproliferation Review* 13(2):151-88, July 2006.

This works for nuclear weapons, which are not wholly illegal, but since chemical weapons are outlawed by the CWC, "CW proliferation" or "CW non-proliferation" implies that the Treaty is somehow ineffective or irrelevant or else that the destruction of chemical weapons required under the CWC has already been completed. Yet even friends of the CWC use the expression, so it would appear to have a special meaning.

Indeed it does. The special meaning applies "proliferation" or "non-proliferation" to chemical weapons as the CWC defines them, not to chemical weapons in the ordinary meaning of the term, which is different. The CWC means chemical weapons not only as tangible objects – special artefacts built for arsenals or military stockpiles -- but also as holdings of "toxic chemicals and their precursors" that do not satisfy the just-mentioned General Purpose Criterion. This means chemicals held for purposes other than "purposes not prohibited under this Convention", as the CWC puts it, and which are not of "types and quantities that are consistent with such purposes".[18] In other words, it is intentions that the CWC also means, not just weapons in the concrete sense. Now that international chemical disarmament is far advanced, thanks to the OPCW, the term "CW proliferation" refers to the spread of intangibles as well as things; and, above all, it refers to the diffusion of technologies that could be applied to CBW if their possessors so chose.

The challenge that CW proliferation poses to the CWC can be disaggregated into two main forms. One is failure to understand what constitutes dual-use technology and the drivers of its diffusion around the world. Without such understanding, governance of the technology, including the formulation and implementation of anti-proliferation measures, is bound to be inadequate. The second form of challenge resides in the existence of State or non-State entities that are ready to aid the exploitation of dual-use technology for purposes of weaponizing toxic chemicals, notwithstanding the nearly global norm against it. Such

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[18] This CWC definition of chemical weapons is to be found in Article II.1 (see note 10 above), with Article II.2 stating that by 'toxic chemical' is meant "*Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals*". The "*purposes not prohibited under this Convention*" that the definition uses in order to exempt some applications of chemicals from the strictures of the CWC are themselves defined later in Article II, in paragraph 9, thus: "*(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 terms used in subparagraph (d) are not themselves defined, but Article II.7 states that 'riot control agent' means "*Any chemical not listed in a schedule, which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure*".

exploitation assistance might possibly be unwitting. The State entities, often considered as proliferators, in this sense include States that have been characterized as "rogue States" or as "failing States". They may also include States that have deliberately chosen to maintain chemical-weapons capability. This last, it needs to be observed, is a category that ought to exclude all OPCW member States. Yet, for all most of us can tell, it may not in fact do so. Challenge inspection and investigation of alleged use are the main mechanisms the CWC provides for coping with this problem of possible non-compliance, but States Parties have shown themselves disinclined to use the mechanisms, leaving the OPCW Technical Secretariat able to see only the chemical weapons that have been declared to it by their possessors; and, even then, the CWC confidentiality regime within which the OPCW is obliged to operate may well prove too opaque to furnish adequate assurance to people outside the need-to-know reaches of the Secretariat.

As for proliferators among non-State entities, these could include business corporations heedlessly serving a lucrative marketplace, criminal organizations feeding a black market, and terrorist groups seeking new weapons. All of this is an especially shadowy area about which even less is known (outside, presumably, the world of policing and security intelligence) than State-level proliferation. Any such greedy business-persons or opportunistic criminals there may be rarely surface. Again, most of us just do not have knowledge enough to accept or to reject the received wisdom. As for proliferation among terrorists, this is probably myth. While it is known that certain terrorist groups have indeed looked at options for chemical/biological weapons (CBW), such intent as they have had to acquire CBW does not seem to have been translated into significant capability. Thus far, other means for terrorist violence have generally proved more attractive or more accessible to them and, since the aberration of Aum Shinrikyo in the 1990s, only the most footling terrorist attempts to acquire CBW have been observed.[19] This is not to say that it could not

[19] Sound risk assessment of CBW terrorism is scarce in the published literature. However, a recent seven-country study of the vulnerability of European society to radiological and CBW terrorism has concluded that any such acts of terrorism today or in the immediate future are unlikely to achieve more than localized nuisance. See the *Interim Report* dated 17 October 2006 from European Commission Framework 6 project 502476, *Assessment of the vulnerabilities of modern societies to terrorist acts employing radiological, biological or chemical agents with the view to assist in developing preventive and suppressive crisis management strategies* (ASSRBCVUL). Some particulars are posted on the European Union website at http://ec.europa.eu/research/fp6/ssp/assrbcvul_en.htm. The Final Report, dated May 2007, in contrast to the

happen: the chlorine reports from Iraq and, before that, from Chechnya, Bosnia and Sri Lanka, show that it can happen at the less destructive end of the scale, albeit as opportunistic rather than planned acquisition of CW (the chlorine initially having been readily to hand in water-treatment plant and suchlike facilities). And the lesson to draw from the still-unresolved 'anthrax letters' affair in the USA during late 2001 is that CBW can put potential for great harm into the hands of technically competent and skilled individuals.[20]

In measures that have been taken outside of the CWC, such as the activities of the Australia Group and also UN Security Council resolutions 1540 (2004) and 1673 (2006), parts of the international community have put in place CW anti-proliferation mechanisms that complement those of the CWC. But these mechanisms, which are chiefly dependent on import and export controls, have to function within a trade and technology-transfer environment that does not favour them, an environment in which globalization is impelling diffusion of industrial and other technologies around the world at what seems to be an accelerating rate. The capability of individual States to acquire chemical weapons, if they so choose, is thereby enhanced, and, if they still need specialized assistance, clandestine procurement networks (such as the so-called Q C Chen network) have now gained increasingly dense cover within which to operate. That networks of this type can indeed spring up to meet demand was clearly shown by the UNSCOM/UNMOVIC investigation of Iraqi CBW acquisition and by the Libyan CW programme. Even States that have no immediate wish to acquire CW may nevertheless move to take advantage of these various possibilities as a hedge against circumstances changing – by, for example, building what could serve as "break-out capacity" into their industrial infrastructure, rather as the USSR created "mobilization capability" for manufacturing bio weapons within its biotech industry during 1973-91. Iran, victim on a terrible scale to Iraqi chemical weapons during 1983-88, very probably falls into this category[21] while at the same time being amongst the

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unclassified Interim Report, has an EU security marking but the accompanying Executive Summary is unclassified.

[20] See, further, Martin Rees, *Our Final Century: Will the Human Race Survive the Twenty-first Century?* (London: Heinemann, 2003); and Milton Leitenberg, *The Problem of Biological Weapons* (Stockholm: The Swedish National Defence College, 2004), pp 137-55.

[21] See J. P. Perry Robinson, "Dual technology and perceptions of Iranian chemical and biological weapons", 20 July 2005; posted at www.sussex.ac.uk/Units/spru/hsp/Papers/450.pdf; and International Institute for

most vocal supporters of the CWC regime and, especially on the medical side, a proactive participant in its international procedures. Nor is there any clear impropriety in such a position, for all the industrial powers, including ones that menace Iran, have manufacturing industries to which they could turn at short notice for CBW agents (whose full weaponization would, however, be more demanding). The fact nevertheless remains that proliferation of this type is a threat to confidence in the regime and therefore a serious challenge to it for as long as the problem of 'dual use' remains unalleviated.

Nor should it be forgotten that duality exists in a variety of forms. The emphasis here has been on civil-military duality, exemplified by technology that may contribute to production both of pesticides, say, and of nerve gas. This duality has important variants, notably the applicability of law-enforcement technology based on toxic chemicals such as Agent CS (an applicability that expressly qualifies as a purpose not prohibited under the CWC) not only to the counterterrorist purposes addressed earlier but also to other military purposes, such as those displayed during the Vietnam War. And beyond that there is the offence-defence duality, exemplified by the ready applicability to CBW of knowledge and other forms of intangible technology that have been acquired through the study and development of anti-CBW protection. This last form of duality may be especially likely to create dangerous impressions in other countries that it is concealing or dissembling CBW development. Proliferation may seem to be happening when in fact it is not.

Accommodation of national interests

Ambassador von Wagner proposed a treaty whose provisions could "*mature and evolve in the course of State practice*". That is the CWC we now have, room for evolution being established by language that had deliberately contained "*constructive ambiguities*" or that had simply left some issues to be resolved later. The alternative model was a legal instrument free of all ambiguity and with its obligations unnuanced, setting out exactly what its States Parties were and were not to do. Even if desirable, such a set-in-stone treaty could not have been negotiated within the deadline that the negotiators finally adopted. We have instead been given plenty of space for "*subtlety on matters of implementation*", and

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Strategic Studies, IISS Strategic Dossier. *Iran's Strategic Weapons Programmes: A Net Assessment* (London: Routledge, 2005)

this has been exploited by the policy organs of the OPCW, most notably during their annual negotiations on future programme and budget. Opportunity for augmenting the process is now presented by the Second CWC Review.

At one level this flexibility is much to be welcomed, for the international relationships within which operation of the CWC is embedded are in a constant state of flux, and this is bound to affect the character of the obligations of the Treaty. But at another level it may create serious difficulties for the CWC, for it encourages mere political expediency to oppose underlying principles of the Treaty. Above all it admits the ineluctable challenge of having to accommodate the interests of the more influential member States even, perhaps, where these may actually degrade the Treaty. A pressing new need finally to resolve a "*constructive ambiguity*" left over from the original CWC negotiations, or else to deal with some unanticipated puzzle about interpretation, can become opportunity to advance an interest. Its accommodation may perhaps make the regime more stable, but it may also make it increasingly unprincipled. The "*constructive ambiguity*" may then have become a fault line in the overall regime.

The proposition that the CWC must evolve if it is to survive changes in international relations clearly lends itself to abuse or, if not abuse, then to shortcomings in the way the CWC is implemented. Disturbing examples of this may be drawn from historical experience, responsibility for each one being attributable to the domestic or bureaucratic politics of this or that major State Party. Here are just a few for one State Party, the USA:

- Chemical weapons abandoned in Panama not declared.
- Production facilities not declared for certain toxic chemicals not satisfying the General Purpose Criterion, including the Agent CS that was filled into tactical (as opposed to "riot control") munitions for use during the Vietnam War, such as 750-pound aircraft bombs, and including also Agents UC and XR – two toxins for which production capacity in 1970 was 600 and 280 pounds per month respectively,[22] *i.e.*, greater in both cases than the one tonne per year threshold above which the CWC requires declaration.

[22] These figures – for staphylococcal enterotoxin and botulinal toxin respectively – did not enter the public domain until after the USA had made its initial declaration to the OPCW. They are from a formerly classified inter-agency paper, *US Policy on Toxins* dated 30 January 1970, which is document 177 in US Department of

- Industry declarations submitted to the OPCW so late – some three years after the deadline specified in the CWC – as to distort development of the industry verification regime.
- The ouster of the first Director General, thereby exposing the OPCW to a judgment by the ILO Administrative Tribunal stating that, in "*accordance with the established case law of all international administrative tribunals, the Tribunal reaffirms that the independence of international civil servants is an essential guarantee, not only for the civil servants themselves, but also for the proper functioning of international organizations*".[23]
- The sustained assertion that riot control agents (RCAs), even ones failing to satisfy the General Purpose Criterion, cannot also be 'chemical weapons' within the meaning of the CWC.
- Repeated public accusations of CWC non-compliance leveled against particular States Parties without activating the means provided in the Convention for dealing with suspected non-compliance.

The point here is not to show that a special finger of blame can be pointed at the USA, for similar lists can be compiled for other influential OPCW member States. The point is simply to exemplify the tension that may arise between principle and practice, the examples being ones of behavior that clearly runs counter to the *ethos* of the CWC. Nor should we be surprised by this recurrent fact of international life. We may nevertheless point to two challenging consequences for the CWC. One is an OPCW Secretariat that has to be exceedingly circumspect regarding great-power interests before it can take any sort of initiative.[24] The second and related consequence is an accumulating list of CWC-implementation issues that are in the too-difficult-to-deal-with category.[25]

State, Office of the Historian, *Foreign Relations of the United States: Nixon-Ford Administrations*, and volume E-2: *Documents on Arms Control and Non-proliferation, 1969-1972* (2007).

[23] International Labour Organization, Administrative Tribunal, 95th Session, Judgment 2232 in Geneva on 16 July 2003.

[24] It is therefore to the great credit of the Secretariat that it has been able, over the past decade, to take the lead on several matters of implementation. See Ralf Trapp, "The First Ten Years", in Ian Kenyon and Daniel Feakes (editors), *The Creation of the Organisation for the Prohibition of Chemical Weapons,* The Hague: T. M. C. Asser Press, 2007, pp 261-89.

[25] On how this accumulation happens, including the propensity of the OPCW Executive Council for deferring decision, see Walter Krutzsch, "Ensuring true implementation of the CWC", *The CBW Conventions Bulletin* no. 76+77 (October 2007) pp 15-17.

These two challenges could ultimately, if worse came to the worst, prove fatal to the CWC regime. Can governments, collectively through the OPCW, be relied upon to address them? No: that is how governments behave, and that is the core of the problem. Does this mean, then, that concerned organs of civil society must attempt something? But what can they do other than observe, record, analyse and perhaps (it could do the career-prospects of the individuals concerned no good at all) publicize? Insofar as there is any sort of remedy, it resides in the OPCW Technical Secretariat having a Director-General and other senior staff of altogether exceptional ability and probity, blessed with long institutional memory.

Pernicious ignorance

There is another twist to this dependence of the CWC regime on the whims of the dominant actors. What happens when an influential State Party seems not to care very much about the Treaty, as when its representatives are inadequately informed about details or about what the Treaty is meant to be doing? For example, was President Bush in sufficient possession of the facts when at a press conference on 18 November 2002 he publicly praised President Putin for having authorized the use of an opiate to end the Moscow-theatre siege during the previous month?[26] This is not to say, of course, that great-power representatives are likely to be any more or less well-informed than other people. In fact, it is not at all easy for anyone to grasp CBW, or even just CW, issues adequately without prolonged immersion in the subject, and neither may this always work, given the secrecies and sensitivities concerning CBW that still abound. Maybe a part of the problem is that CBW is a subject that historians have largely ignored, meaning that people wanting or having to know about it have little reliable and readily accessible literature available even for basic chronological information and broad-brush analysis. Different concepts of the same matter can co-exist among groups even of specialists without their members appreciating that the concepts are different. In the absence of good reference works of sufficient breadth and independence of vested interest, both misapprehension and ignorance have become common in policy-shaping circles, perhaps including those people who might have advised President Bush ahead of that press conference.

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[26] See the fifth entry for 18 November 2002 in the News Chronology section of *The CBW Conventions Bulletin* no. 59 (March 2003) p 16.

A situation in which ignorance prevails can take on the appearance of heedlessness, and the converse may also be true. Here are some examples of where this has become pernicious, endangering the regime or options for strengthening it – examples of where ignorance itself may become a challenge to the CWC:

- It has become common over the years for representatives of a curiously large number of CWC States Parties to assert that there is no such thing as a "General Purpose Criterion" in the text of the CWC, and therefore that there is no foundation for the comprehensive nature of the prohibitions set out in the CWC or for arguing that they extend to chemicals not included in the Schedules. It is not at all clear how the representatives thinking this, or at any rate affecting to believe it, have managed to disregard Article II.1(a) and Article VI.2 of the Treaty.
- The US imputation that Riot Control Agents are not 'toxic chemicals' in the sense of CWC Article II.2 (because the USA holds that RCAs can never be chemical weapons) resonates with people who equate 'toxicity' with 'lethality', regardless of the fact that toxicity may take forms other than life-threatening ones. That the CWC does not limit its concept of toxicity to lethal toxicity is clear from the words used in Article II.2.[27] True, if properly used, RCAs rarely cause "*death or permanent harm to humans or animals*"; but their whole *raison d'être* requires that they produce "*temporary incapacitation*". Ignorance of this point has led people to think that the CWC applies only to lethal chemical weapons. In fact 'lethal' and 'lethality' are neither words nor concepts that figure in the CWC at all.
- Presumably because the 1960s impetus to strengthen the international ban on use of CBW set out in the 1925 Geneva Protocol led to two separate CBW disarmament treaties, many people today regard BW and CW as necessarily separate categories, this despite the many military, technical, legal, institutional and other characteristics shared by BW and CW. Such heedlessness has brought with it neglect of the special opportunities for strengthening CBW disarmament that now exist in the areas where the two treaties overlap. As the Lemon-

[27] The text is quoted in note 19 above.

Relman Report from the US National Academies observed in 2006,[28] toxins and synthetic biological agents, including bioregulators, immunoregulators and small interfering RNAs, fall within the scope of both treaties, thus providing "*parallel or linkable features*" that warrant careful attention during the 2008 CWC Review Conference (having failed to receive it during the 2006 BWC Review Conference). Moreover, as more and more biology becomes understandable in terms of chemistry and chemicals, the distinction between BW and CW is bound to become increasingly narrow, verging on the worthless. Yet not only are governments apparently passing up on this rich opportunity, a surprising number of officials even appear to believe that only the BWC covers toxins and their ilk, not the CWC as well. They fail to see the possibilities presented by the routine verification regime of the CWC for enhancing transparency in a burgeoning area of dual-use biotechnology where misperception could prove extraordinarily dangerous.[29]

The examples just cited all seem to have ready explanations. One other example, however, does not, which makes it all the more important to understand. South Korea insists on its identity as a declared CW-possessor State being withheld from all OPCW publications. The CWC gives it a right to do this, but why does Korea persist in asserting that right even when its officials have made statements to the press about their country's programme for destroying its chemical weapons?[30] It is hard to believe that this is simply another example of a State Party abusing the privacy provisions of the CWC through mere heedlessness or ignorance. Nor, surely, can it be a consequence of the USA having stockpiled chemical weapons in South Korea.[31]

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[28] The quotation here is from page 246 of the Report, which is cited in note 9 above.
[29] For more detail on this idea, see: A. P. Phillips and J. P. Perry Robinson, "The CWC and Chemicals of Biological Origin", a paper presented at the OPCW Academic Forum, The Hague, 18-19 September 2007; and J. P. Perry Robinson and A. P. Phillips, "Addressing the toxin problem", a paper presented at the 27th Workshop of the Pugwash Study Group on Implementation of the CBW Conventions, Geneva, 8-9 December 2007.
[30] See, for example, the entries for 8 May, 17 July and 4 August 2000 in the News Chronologies of *The CBW Conventions Bulletin* no. 49 (September 2000) pp 26, 41, and no. 50 (December 2000) pp 26-27.
[31] The fact of such stockpiling entered the public domain only with the recent declassification of a letter from U Alexis Johnson [Deputy Under Secretary of State for Political Affairs] to William P. Bundy [Deputy Assistant Secretary of Defense for International Security Affairs] dated 14 November 1963, copy in the LBJ Library. There seems to be no public information on what has since happened to the stockpile in South Korea.

What is here being called the challenge of pernicious ignorance thus takes a variety of forms. Again the remedy may seem to lie partly with civil society, especially if a mechanism can be found for promoting sound and comprehensive writing of history in the CBW field. Any such historians would need much help, not least in the form of enhanced access to types of documentation that antique sensitivities have kept out of the public domain. It is important that the OPCW, too, should have workable procedures for reviewing the security-classification of the information its Secretariat holds confidential at the request of the member-States that submitted it originally; and for releasing declassified information. Now is definitely not the time for the OPCW to perpetuate its culture of opacity, of attenuated transparency. To do so would convey a message of disregard for the outside world, including the civil society on which, to a degree, the OPCW will depend for its future well-being.

Creeping legitimization

In the ability of CW agents to target themselves on particular life processes, there is indeed, as the old advocates of the weapons used to claim,[32] growing scope to 'tailor' the nature or severity of effects of an agent to a particular objective desired by its user. As the life sciences advance, that scope is likely to increase. Because such tailoring could also open the way to weapons suited to hugely malign purpose,[33] an effective governance regime is essential. That same tailoring can, however, provide weapons that, at first glance, appear to be of an altogether more acceptable character, including ones having effects gentler than most other means of violence. Examples include the 'tear gas' of police forces; the psychochemical weapons that, according to past US Army teaching,[34] would cause the enemy to "*linger in overpowering reverie*"; and the entirely mythical knock-out agents of "*war without death*" that have figured in science fiction since the Nineteenth Century. Add to these chemicals the various infective agents that can induce highly debilitating diseases of

[32] See, for example, Brig-Gen J. H. Rothschild, *Tomorrow's Weapons: Chemical and Biological*, New York: McGraw-Hill, 1964.
[33] On which see, especially, British Medical Association (BMA) Board of Science and BMA Science & Education department, *The use of drugs as weapons: the concerns and responsibilities of healthcare professionals*, London: BMA, May 2007, at page 1 (noting that the scope could include "intentional manipulation of peoples' emotions, memories, immune response or even fertility").
[34] US Army Chemical Center and School, Fort McClellan, "New chemical agents and incapacitating agents", Lesson Plan LP6075, undated [*ca* 1965].

low mortality, and a category of CBW is created whose features seem quite different from those of WMD, whose possession may therefore appear desirable, and whose constraint by Treaty may thus come to seem a liability, notwithstanding the abyss into which the tailoring also could cast us.

A rather wide variety of commercial, political and military interests stand to benefit from exclusion of some or all of these non-WMD CBW from the governance regime. *Sub rosa* campaigning to that end has long been under way, most notably during the final months of the CWC negotiation in mid-1992, when the protagonists of what were then starting to be called 'Non Lethal Weapons' (NLW) came up against governmental officials charged with securing consensus on those parts of the CWC text that dealt with RCAs.[35] The issue turned then on whether RCAs fell within the definition of 'toxic chemicals', subject, thereby, to the General Purpose Criterion that would serve to regulate the duality of their application either in warfare (prohibited) or in law-enforcement (permitted). For reasons that remain unclear to this day, the USA favored exclusion but, finding itself isolated in this position within the Western Group, secured a compromise[36] in which the CWC expressly prohibited use of RCAs "*as a method of warfare*" but remained silent on the toxic character of RCAs, thus perpetuating a semblance of ambiguity on whether the CWC did or did not capture RCAs. The way then became open for determined NLW protagonists to argue that, if tear gas was not proscribed by the CWC, then neither should the more modern varieties, for which they coined the category-label 'Advanced RCA Technology' (ARCAT). Subsequent ARCAT development projects funded by the US government included work on the fentanyls and other such intensely toxic chemicals. The process that can be seen here is a surreptitious equation of toxicity with lethal toxicity. In this attempt to loosen the CWC constraint on the weaponization of other forms of toxicity we have started to see a creeping legitimization of non-WMD CBW. This is a most serious challenge to the regime. A situation in which some types of toxic weapon are tolerated but others not is certain to be unstable.

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[35] A close account of these and related events is to be found in J P Perry Robinson, "Non lethal warfare and the Chemical Weapons Convention", 12 October 2007, a submission to the OPCW Open-Ended Working Group on Preparations for the Second CWC Review Conference, posted at www.sussex.ac.uk/Units/spru/hsp/Papers/421rev3.pdf.

[36] Proposed not in fact by the USA but by a group of eleven Neutral and Non-Aligned States looking also, and in sharp contrast to the USA, for a CWC prohibition of herbicide warfare.

The instruments of creeping legitimization include, not only 'public diplomacy' and other more hidden pressures for exemption, but also national legislation. In the USA the "Ensign Amendment" of the 2006 Defense Authorization Act asserts that "*riot control agents are not chemical weapons*".[37] Fortunately no other State Party to the CWC has adopted such a position, nor even commented publicly on what the USA has done. There are signs that the topic of NLW will largely escape the purview of the Second CWC Review Conference, which is where it clearly ought to be.

Conclusion

The different challenges identified in this essay suggest a rather wide variety of alleviating measures that might be considered by governments keen to maintain the OPCW as an effective international organization, even by organs of civil society as well. The main points are as follows.

There needs to be wider recognition within civil society that, throughout the future of the CWC, there will inevitably be tension between political drivers of decision and principled implementation, between political expediency and the wellbeing of the Treaty. These are tensions of which we are all aware but, as challenges, tend to disregard. Sound stewardship of the CWC must be based on reconciliation of divergent practice and principle, even, conceivably, to the point of adapting the terms of the Treaty to the prevailing political climate. Amending or otherwise changing the Treaty would be an extreme option, however, and no such adaptation should be contemplated that would endanger the heart of the CWC.

At that heart lays the General Purpose Criterion, which is the primary mechanism whereby the CWC provides protection against those as-yet-unknown chemical weapons that could include ones of unprecedented malignance, and which is a vital part of the

[37] In its section 1232, the US National Defense Authorization Act for Fiscal Year 2006 states: "*It is the policy of the United States that riot control agents are not chemical weapons and that the President may authorize their use as legitimate, legal, and non-lethal alternatives to the use of force that, as provided in Executive Order 11850 (40 Fed.Reg.16187) and consistent with the resolution of ratification of the Chemical Weapons Convention, may be employed by members of the Armed Forces in war in defensive military modes to save lives, including the illustrative purposes cited in Executive Order 11850.*" On 27 September 2006, in evidence to the Senate Armed Services Subcommittee on Readiness and Management Support, which is chaired by Senator John Ensign, the Defense Department in the person of Joseph Benkert, Acting Principal Deputy Assistant Secretary of Defense for International Security Policy, testified that the "*Administration agrees with [this] statement*".

machinery for governance of dual-use technology. Yet the Criterion is not being implemented adequately. Partly, this is because it is not at all easy, as a matter of practical administration, to devise and execute effective policies for doing so. But in part also it is probably due to a mix of ignorance, lack of understanding, incompetence, heedlessness, short-termism, and conflicting political interests, including those interests that are rooted in NLW technology. Action to improve this situation warrants the very highest priority. Other issues, too, have disappeared into the too-difficult-to-deal-with category. A means has to be found for restoring them to active consultation among States Parties. This is clearly a task for the Second CWC Review Conference as it looks towards a future in which the declared CW stockpiles and infrastructure no longer exist. If the Conference does not mandate such consultations, it will have failed.

The OPCW itself ought to have been capable of such action as a matter of routine, but evidently it is not. The governments of some of its member States seem to have become an intransigent part of the problem, while the Technical Secretariat has been blighted by the seven-year tenure policy for staff and the consequent fading of its institutional memory, plus, in certain areas, a fading of its technical competence, and hindered, too, by the magnitude of the obstacles it must overcome before it can take an initiative. The initiatives that it has been able to take, however, for example on the National Implementation Action Plan, have successfully enhanced the overall regime. We may hope that the Second Review Conference will recognise this expressly when reaffirming the commitment of OPCW Member States to the CWC.

Finally, we in civil society must not lose sight of the fact that the CWC is an engagement of States Parties, of which governments are one element. Governments may represent States Parties in the fore of the OPCW, but organs of civil society are also elements of those same States. They cannot shed their own responsibilities for the proper implementation of the CWC, especially in areas where our governments appear hamstrung, incapable of action; and especially at the present juncture.

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CHALLENGES FACING THE CWC INDUSTRY VERIFICATION REGIME

The verification system of the Chemical Weapons Convention (CWC) seeks to ensure that the member States declare and destroy all stockpiles of chemical weapons (CW) and that no future production of CW takes place in the guise of chemical manufacturing for peaceful purposes.

To date, CWC verification has tended to focus on the disarmament component of the Treaty rather than the non-proliferation component. As the CW destruction process gradually winds down, however, these priorities will need to be adjusted.

Because many toxic chemicals and their synthetic intermediates (precursors) are "dual-use," having both civilian and military applications, the CWC is the first arms control treaty to cover a major industrial sector—the chemical industry.

The CWC industry verification regime requires the declaration and routine on-site inspection of commercial plants that manufacture dual-use chemicals. These inspections are performed by multinational teams from the Organization for the Prohibition of Chemical Weapons (OPCW), based in The Hague.

Over the past decade of implementation, however, a number of gaps have emerged in the industry verification regime that must be addressed to prevent the future reacquisition of chemical weapons. The upcoming Second Review Conference of the CWC provides a good opportunity to address these challenges.

Today I will briefly discuss the gaps in the CWC industry verification regime and suggest some possible solutions.

The Limited Scope of Industry Verification

Because many toxic chemicals have legitimate peaceful uses and new ones are continually being discovered, the negotiators of the CWC decided not to base the Treaty's prohibitions on a specific list of chemical agents and their precursors.

Instead, the basic prohibitions in Article I apply to *any* toxic chemical whose development, production, stockpiling, or use is intended for hostile purposes. This approach is called the "General Purpose Criterion."

In principle, because of the comprehensive nature of its prohibitions in the CWC, the Treaty cannot be rendered obsolete by scientific and technological advances. As soon as a new toxic chemical is developed in the laboratory, it automatically falls under the purview of the General Purpose Criterion.

However, despite the comprehensive prohibitions of the CWC, the industry verification system is based on three lists, or "Schedules," of agents and precursors that represent only a fraction of the universe of chemicals of concern. Facilities that produce such "scheduled" chemicals above specified quantitative thresholds are subject to mandatory declaration and periodic routine inspection.

The CWC negotiators decided to base the industry verification system on the Schedules for practical reasons. Without a finite list of chemicals and quantitative production thresholds to determine which industry facilities must be declared and inspected, CWC verification would have been open-ended and hard to implement.

The negotiators assigned toxic chemicals and their precursors to the three Schedules depending on the risk each chemical poses to the CWC and the extent of its legitimate peaceful applications. Schedule 1 lists known CW agents and their precursors, Schedules 2 consists of toxic chemicals and precursors that are used commercially in small quantities, and Schedule 3 lists toxic chemicals and precursors that are used commercially in large quantities.

Unfortunately, the Schedules were obsolescent even before the CWC entered into force. Schedule 1 includes only CW agents and precursors that were developed in the 1950s or before. As a result, not one of the CW agents listed on Schedule 1 was less than twenty years old when the CWC entered into force.

Although many of the older CW agents, such as mustard gas, remain of concern and must be monitored, some more recent CW agents and their precursors are unlisted and deserve greater attention. For example, among the unlisted chemicals are the Novichoks, a family of binary nerve agents developed by the Soviet Union during the 1970s and 1980s.

Given the large number of toxic chemicals potentially suitable for weaponization that remain outside the CWC Schedules, the narrow scope of the routine industry verification system risks creating false confidence in compliance.

In addition, rapid advances in chemical science and technology pose new challenges for CWC verification. Increasingly, the pharmaceutical industry is using techniques called combinatorial chemistry and high-throughput screening to identify thousands of novel compounds that affect vital body functions. Some of these compounds are highly toxic and might be developed into CW agents.

Further, the advent of multipurpose chemical production facilities has made the synthesis of chemicals increasingly flexible, making it possible to switch rapidly from one product to another in response to shifts in market demand. Such multipurpose plants are potentially easier to divert to illicit CW production than the larger, more inflexible facilities that produce scheduled chemicals.

Finally, new production technologies such as micro-reactors, which can synthesize large volumes of chemicals in a small space, may reduce the footprint of a clandestine plant and the "signatures" associated with CW agent production.

These changes in the chemical industry have made it easier for would-be violators to break out of the CWC by acquiring the capacity to manufacture large amounts of CW agents on short notice, without stockpiling them for long periods. Such a "breakout" capability is much harder to detect than an existing CW stockpile.

To compensate for the drawbacks of the Schedule-based approach to verification, the negotiators of the CWC devised four "safety nets" that were designed to capture the production of scheduled chemicals at undeclared sites, as well as the production of unscheduled CW agents at either declared or undeclared sites.

Unfortunately, the implementation of the CWC over the past decade has failed to make effective use of the four safety nets, creating serious gaps in the industry verification regime.

The First Safety Net: Amending the Schedules

Although the CWC includes an expedited procedure for amending the Schedules to add toxic chemicals and precursors that pose a threat to the object and purpose of the treaty, the member States have so far declined to do so.

For example, the Novichok nerve agents have not been added to Schedule 1, partly because Russia refuses to acknowledge their existence. Another reason is that some countries worry that listing these agents and their precursors would disclose their molecular structure and thereby facilitate their proliferation.

Because of the large number of newly discovered chemicals with a potential for weaponization, many of which are currently produced in small quantities below the declaration and inspection thresholds in the CWC, amending the Schedules does not appear to be the best way to address the gaps in industry verification.

The Second Safety Net: Coverage of "Other Chemical Production Facilities"

The CWC Verification Annex requires the declaration of "other chemical production facilities" (OCPFs) that do not currently produce scheduled chemicals but have the potential to do so on a large scale.

OCPFs are defined as plant sites that produce by synthesis more than 200 metric tons of unscheduled discrete organic chemicals per year, or that comprise one or more plants that produce by synthesis more than 30 metric tons of an unscheduled chemical containing the elements phosphorus, sulfur, or fluorine, which are common constituents of CW agents. About 5,000 OCPFs have been declared, or considerably more than the number of plants that produce scheduled chemicals.

Because of technological changes such as the use of micro-reactors and the convergence of chemical and biological production methods, as well as the growth of chemical industry in developing countries, it will be necessary to expand OCPF regime to inspect a broader range of production facilities.

About 10 percent of OCPFs have technological and chemical features that pose potential risks to the CWC. Of greatest concern are facilities that incorporate equipment designed to provide maximum production flexibility and the containment of toxic or corrosive materials.

The OPCW Technical Secretariat currently selects OCPFs for inspection in a semi-random manner, using weighting factors such as the equitable geographical distribution of inspections and a risk-assessment of each plant site.

The OPCW's Scientific Advisory Board has recommended increasing the total number of OCPF inspections, while refining the selection algorithm to identify those plant sites that pose the greatest potential risks to the CWC. Doing so will require more information provided voluntarily by member States. Furthermore, although sampling and analysis is currently performed during routine inspections of Schedule 2 production facilities, CWC member States should consider using it during inspections of OCPFs that have been designated "high risk."

Increasing the scrutiny on OCPFs would partially compensate for the limitations of the CWC Schedules. To date, however, several developing countries that possess chemical industries have opposed expanding OCPF inspections because doing so would require them to shoulder a larger share of the verification burden.

The Third Safety Net: Challenge Inspections

Article IX grants a member State the right to request a "challenge" inspection of any facility, declared or undeclared, on the territory of another State Party that the requesting State suspects of a treaty violation.

The CWC negotiators intended that the challenge inspection mechanism would serve as a safety net to capture illicit development and production facilities, stockpiles, and activities that a cheater has deliberately not declared. To date, however, no member State has made use of this key verification instrument.

The United States, for example, has publicly accused China, Iran, Russia, and Sudan of violating the CWC but has not provided hard evidence or pursued these allegations by requesting challenge inspections.

Challenge inspection remains a key element of the CWC verification regime. Yet if this measure is to serve as a credible deterrent, there must be a realistic chance that a challenge inspection can be requested and carried out at any time.

To that end, member States should use challenge inspections to investigate compliance concerns that are less politically charged than outright violations of Article I, such as a failure to declare treaty-relevant facilities.

The Fourth Safety Net: Verification at the National Level

The fourth safety net in the CWC industry verification regime is national implementation. The treaty provides for a division of labor between the OPCW at the international level and the National Authorities in the member States.

Each State Party is expected to ensure the compliance of its chemical industry, to monitor trade in scheduled chemicals with other member States, and to enforce the ban on exports of Schedule 1 and 2 chemicals to non-member States. Yet 50% of CWC parties have not passed the necessary laws and subsidiary regulations.

Some of the basic obligations in Article I of the CWC, such as restricting transfers of scheduled chemicals to non-States Parties and reporting aggregate national data on trade in scheduled chemicals with other member States, are currently verified only at the national level. Giving the OPCW the capability to monitor these trade-related provisions at the international level would strengthen the regime.

Conclusions

More than a decade after its entry into force, the CWC has become a vital instrument for preventing the acquisition and use of chemical weapons by both States and sub-State actors. Nevertheless, the gaps in the industry verification regime threaten to weaken the treaty's effectiveness as a non-proliferation tool.

The upcoming Second Review Conference of the CWC offers a good opportunity to discuss these issues and to develop an action plan to strengthen the industry verification regime. Member States should consider the following steps:

- Reaffirm the General Purpose Criterion as the basis for the prohibitions in the CWC and discuss how to bring unscheduled toxic chemicals and precursors under the purview of the industry verification regime;

- Increase the number of Other Chemical Production Facilities that are routinely inspected, and refine the selection algorithm to focus on the subset of OCPFs that pose the greatest risks to the CWC;
- Lower the political bar for requesting challenge inspections by using them to clarify ambiguities as well as to expose outright violations; and
- Continue providing assistance to member States in adopting CWC implementing legislation and subsidiary regulations.

CWC Humanitarian Law and Protecting against Chemical Weapons

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CWC, HUMANITARIAN LAW AND PROTECTING AGAINST CHEMICAL WEAPONS

CWC, Humanitarian Law and Protecting against Chemical Weapons

This session covers a number of legal and practical issues that could be of contemporary interest. In regard to lethal weapons — *i.e.* items specifically designed, developed or modified for military use as well as civilian chemicals used with an intent to kill—the provisions of international humanitarian law that apply in all circumstances are supplemented by the Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare which forms part of the 1925 Geneva Protocol.

CW-related international humanitarian law was largely disregarded following the battlefield use of chemical weapons by Iraq after 1982. The international community did not respond in a unified manner until 1988, when the response was an even handed condemnation of the continued use of chemical weapons in the conflict between Iran and Iraq and a call for restraint by both Parties. Iranian authors often draw attention to the impact on their own force planning of being left alone in the face of Iraqi chemical weapon and ballistic missile attacks. The lack of solidarity behind international humanitarian law is perhaps one factor that helped create the conditions for the serious proliferation challenge posed by Iran today.

As long as chemical weapons may be present in military arsenals there are specific aspects of IHL which will need to be taken into account. However, issues only currently arise from chemical weapon use on the battlefield in a very small number of locations and regions. The chemical weapons stocks declared under the CWC are being drawn down in a verified and systematic manner. Three countries—Egypt, Syria and North Korea—are

outside the CWC and frequently mentioned as countries that may have offensive chemical weapon stocks. All three are Parties to the 1925 Geneva Protocol.

As a practical matter it would clearly be prudent for armed forces in close proximity to the States mentioned to protect themselves against the contingency of CW attack, and this can perhaps be taken for granted. However, issues arise from the nature of self-help.

- The armed forces of Israel—widely believed to have a nuclear weapon capability—as well as the United States and the United Kingdom are actively engaged in combat close to the borders of Syria. What might be considered a legitimate and proportionate response to either the threat of an attack or an actual attack with chemical weapons?
- Leaving aside the armed forces of powerful countries, issues arise from the possible use of CW against actors that are less capable of self-help.
- Countries that have renounced a national deterrent or response may consider an effective assistance mechanism able to reduce the impact of an attack with chemical weapons to be essential to their security. If assistance is to be provided without a political filter as quickly as possible there should be contingency plans in place. On the other hand, an automatic right to assistance would be an expensive obligation for the actor mandated to provide it in conditions where the likelihood of an attack or threat of attack is very low.
- The armed forces of States are not the only actors in a contemporary conflict zone. Recent experience underlines that a wide array of civilian agencies, non-governmental actors (some humanitarian, some media-related and private military actors of different kinds) are likely to be present. The use of an improvised device to spread chlorine gas in Iraq has raised the question of how to protect non-State actors in a conflict zone. Would Article X of the CWC be applied to non-State actors or would they need to rely on other forms of protection?
- If the use of chemical weapons against non-military actors in a conflict zone during an international armed conflict is a war crime then the perpetrators would be subject to universal jurisdiction of international criminal law.

Actors and technical capacities

There are a range of actors that could, in one way or another, make a direct contribution to the protection against attacks by chemical weapons of the kind noted above.

Between 2002 and 2005 NATO, the OPCW and the UN-OCHA all worked together in exercises in Croatia, Russia and Ukraine to test how the political commitment to solidarity in the face of an illegal attack using chemicals might be met in operational terms. In other exercises the same actors have worked together in a scenario based on a serious industrial accident at a plastics factory.

The OPCW itself has some capacity to respond, including technical items. We will hear more about the OPCW from the panel. However, it would also be interesting to learn more about the modalities of assistance from other actors—including national contributions, given that most equipment and manpower will always be held by States. Are the existing capacities considered credible and if not are the perceived weaknesses of a technical nature or related to the political willingness to provide assistance? Are they made through the OPCW? Are others going to be offered on a case-by-case basis from one Party directly to another Party? If the latter is the case, what does the OPCW have to offer to facilitate the process?

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THE CHEMICAL WEAPONS CONVENTION AND INTERNATIONAL HUMANITARIAN LAW: A BRIEF OVERVIEW OF SOME CRITICAL ISSUES

1. The CWC and the extent of the ban on chemical weapons in international customary law

By banning the development, production, acquisition, stockpiling and retention of chemical weapons, the CWC has not rendered international humanitarian law rules relating to these weapons obsolete. Quite to the contrary, the CWC also restates and extends the ban on the *use* of chemical weapons, already contained in the 1925 Protocol. Nor can we say that this ban has become obsolete fifteen years later, as some States are not yet Parties to the CWC, as many chemical weapons of States Parties have not yet been destroyed, and in any case, as they could always be produced again.

There is no doubt that, as an effect of the 1925 Protocol and of the CWC, the first use of chemical weapons is today prohibited under customary international law, both in international and non-international armed conflicts[38]. There is a strong argument for asserting that a customary rule prohibiting reprisals in kind (which are obviously banned by the "never under any circumstances" clause of Art. I, CWC) is emerging too. And this argument is certainly further strengthened by Art. 8.2.(b) (xviii) of the ICC Statute, whereby *"(e)mploying asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices"*

[38] See, inter alia, A. Gioia, "Armi chimiche e batteriologiche", in *Digesto delle discipline pubblicistiche*, IV ed., Aggiornamento, Torino, UTET, 2000, at p. 56.; J.-M. Henckaerts and L. Doswald-Beck (eds.), *Customary International Humanitarian Law*, vol. I, Cambridge, Cambridge U.P., 2005, at p. 259 and f.; Y. Dinstein, "Customary International Law and the Prohibition of Use of Weapons of Mass Destruction", in G. Gasparini and N. Ronzitti (eds.), *The Tenth Anniversary of the CWC's Entry into Force: Achievements and Problems*, Quaderni IAI, Istituto Affari Internazionali, Rome, December 2007, p. 87 and ff., at p. 94.

in international armed conflicts is considered a war crime (where it is not specified that the crime would subsist only in the case of first use).

However, such a second customary norm has probably not yet fully emerged, as the ICC Statute, highly relevant as it is, is still far from being universal; and as there still are a certain number of States maintaining reservations with regard to the 1925 Protocol, interpreting the prohibition of use of chemical weapons under this instrument as limited to first use. It is true that the majority of these States is now bound by the CWC, which supersedes those reservations; but they might come into play again, whenever these States decided to avail themselves of the provision in Art. XVI, CWC, allowing withdrawal from the Convention if the State Party "*decides that extraordinary events, related to the subject-matter of this Convention, have jeopardized the supreme interests of its country*". The spread of situations of resort by other States (or entities) to chemical weapons and especially the fact of being directly subject to a threat of such use, or worse to a proper chemical attack, might be considered by a State Party to constitute such an extraordinary event (although, it has to be recalled, with regard to this last case, that the withdrawal from the Convention can only take effect after a 90 days notice)[39].

Finally, it is also significant that the ICRC study on customary international humanitarian law, which has been criticised for being sometimes too generous in affirming the customary nature of certain IHL provisions[40], is quite cautious in affirming that the prohibition of retaliation in kind with chemical weapons is customary[41].

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[39] See, among others, A. Gioia, "Armi chimiche e batteriologiche" (note 1, above), at p. 56; N. Ronzitti, "Assessment of the 1993 Chemical Convention: Light and Shadow", in G. Gasparini and N. Ronzitti (eds.), *The Tenth Anniversary of the CWC's Entry into Force…*(note 1, above), p. 33 and ff., at p. 37 and f.

[40] See, e.g., D. Turns, "Weapons in the ICRC Study on Customary International Humanitarian Law", in *Journal of Conflict and Security Law*, 2006, p. 201 and ff. (also with regard to chemical weapons). More generally, see J.B. Bellinger, III and W.J. Haynes II, "A US Government Response to the International Committee of the Red Cross Study *Customary International Humanitarian Law*", in *International Review of the Red Cross*, 2007, p. 443 and ff. See also the reply by J.-M. Henckaerts, "*Customary International Humanitarian Law*: A Response to US Comments", ibid., p. 473 and ff.

[41] See J.-M. Henckaerts and L. Doswald-Beck (eds.), *Customary International Humanitarian Law* (note 1, above), at p. 260: "*There is increasing evidence that it may now be unlawful to retaliate in kind to another State's use of chemical weapons. …*".

2. The use of toxic chemicals and riot control agents for law enforcement purposes

The use of toxic chemicals for law enforcement purposes (LEPs) remains a critical issue in the Convention, as the broadness of the concept of law enforcement is subject to debate, and as it is not immediately evident from the CWC text whether toxic chemicals, apart from riot control agents (RCAs), can be used in such situations: the only seemingly clear aspect being that Schedule 1 chemicals can never be used in these circumstances[42]. What must be entirely clear is that no toxic chemicals and no RCAs can ever be used in combat situations, whether in international or non international armed conflicts. So the claim to use such agents in so-called anti-terrorist operations, or within peace-keeping operations cannot be a means of circumventing the ban on using chemicals in any kind of armed conflict[43].

What remains controversial is, indeed, the question if the Convention allows RCAs (or possibly even Schedule 2 or 3 toxic chemicals) in non-combat activities in armed conflicts situations, such as the keeping of law and order within an occupied territory or in a

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[42] Toxic chemicals are chemicals which through their "*chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals*" (CWC, Art. II 2.). Those toxic chemicals "*which have been identified for the application of verification measures*" are listed in 3 Schedules contained in the Annex on Chemicals (CWC, Art. II 2.). As for Schedule 1 chemicals (i.e., the most dangerous ones), the Annex on Implementation and Verification (Verification Annex) provides that a State Party "*shall not produce, acquire, retain, transfer or use Schedule 1 chemicals unless: (a) The chemicals are applied to research, medical, pharmaceutical or protective purposes; …*" (Part VI.A.2.). LEPs are not mentioned. The other toxic chemicals, whether or not included in Schedules 2 or 3, and their precursors are to be considered "chemical weapons", and thus totally banned, "*except where intended for purposes not prohibited under this Convention*" (CWC, Art. II 1. (a), Art. I). "*Purposes not prohibited under this Convention*" means, inter alia, "*(L)aw enforcement including domestic riot control purposes*" (CWC, Art. II 9. (d)). Furthermore, according to Art. VI 1., CWC, "*(E)ach State Party has the right (…) to (…) use toxic chemicals and their precursors for purposes not prohibited under this Convention*". As for RCAs, they are defined as "*(A)ny chemical not listed in a Schedule, which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure*" (CWC, Art. II 7.). Art. I.5, CWC specifies that each State Party "*undertakes not to use riot control agents as a method of warfare*". On the issue of use of "non-lethal" chemical agents (but sometimes with lethal effects…) for LEPs, with special regard for the Moscow theatre incident of October 2002, see D.P. Fidler, "The Meaning of Moscow: "Non-lethal" Weapons and International Law in the Early 21st Century", in *International Review of the Red Cross*, 2005, p. 525 and ff.

[43] For a partially similar view see D.P. Fidler, "The Meaning of Moscow…" (note 5, above), at p. 540 and ff. On the plans to use incapacitating agents in anti-terrorist operations see, among others, S. Batsanov, "The Tenth Anniversary of the Chemical Weapons Convention: Assessment and Perspectives", in G. Gasparini and N. Ronzitti (eds.), *The Tenth Anniversary of the CWC's Entry into Force…* (note 1, above), p. 9 and ff., at p. 27.

prisoners of war (POWs) camp. My view is that law enforcement purposes basically relate to the keeping of law and order by a State within its own territory (but not in combat activities within the framework of a non international armed conflict). Using RCAs in an occupied territory or in a POWs camp would contradict the ban on using RCAs "*as a method of warfare*"[44]. Moreover, broadening the limits of LEPs could easily leave way to ambiguous, in-between situations that would, in their turn, easily transform into violations of the fundamental ban on chemical weapons. That is why, for example, a clarification by the U.N. of the norms relating to the use (or better the prohibition of use) of chemicals in peacekeeping activities would be highly desirable[45].

To complete a rather worrisome picture, one cannot avoid taking note of the existence of sensibly diverging positions on the whole issue of the use of chemical agents for law enforcement purposes, in particular on the part of the United States[46].

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[44] See N. Ronzitti, "La Convention sur l'interdiction de la mise au point, de la fabrication, du stockage et de l'emploi des armes chimiques et sur leur destruction", in *Revue générale de droit international public*, 1995, p. 881 and ff., at p. 895 and f., where the negotiating history of the provision is also recalled, with the United States requiring and obtaining the fall of the term "domestic" that previously characterized "law enforcement". For a different view see D.P. Fidler, "The Meaning of Moscow…" (note 5, above), at p. 543 and ff.; Y. Dinstein, "Customary International Law and the Prohibition of Use of Weapons of Mass Destruction" (note 1, above), p. 95 and f.

[45] The UN Secretary General's Bulletin on Observance by United Nations Forces of International Humanitarian Law of 6 August 1999 (ST/SGB/1999/13), in fact, prohibits "*the use of asphyxiating, poisonous or other gases*" (Section 6.2), thus merely reproducing the terms of the 1925 Protocol; moreover, it only applies to UN forces "*when in situations of armed conflict they are actively engaged therein as combatants, to the extent and for the duration of their engagement*" (Section 1.1). On the point, see N. Ronzitti, "Assessment of the 1993 Chemical Convention…" (note 2, above), pp. 41-43.

[46] See, in particular, the US *Naval Handbook* (1995), where the United States "considers that" the prohibition of riot control agents as a method of warfare under the CWC "*applies in international as well as internal armed conflict but that it does not apply in normal peacekeeping operations, law enforcement operations, humanitarian and disaster relief operations, counter-terrorist and hostage rescue operations, and non-combatant rescue operations conducted outside of such conflicts. The United States also considers that it is permissible to use riot control agents against other than combatants in areas under direct U.S. military control, including to control rioting prisoners of war and to protect convoys from civil disturbances, terrorists and paramilitary organizations in rear areas outside the zones of immediate combat*" (reproduced in J.-M. Henckaerts and L. Doswald-Beck (eds.), *Customary International Humanitarian Law* (note 1, above), vol. II, No. 548, p. 1746). See also the Executive Order No. 11850, issued by the US President on 8 April 1975, and the 1994 President's accompanying message to the transmission to the US Senate of the findings of the Clinton administration's review of the impact of the CWC on such Executive Order (see ibid., No. 578, p. 1756 and No. 582, p. 1757).

3. Verification

The CWC provides for a verification procedure, which is available also in cases of use or suspected use of chemical weapons, and which is in itself an extraordinary achievement, as the basic lack of control and implementation mechanisms in IHL is a well known phenomenon. The procedure is that of challenge inspections[47]. If aptly working, this system would be extremely useful. But it presents a certain number of criticalities:

a) firstly, it cannot operate with regard to States which are not Parties to the CWC;

b) secondly, it operates solely on the basis of the initiative of a State Party. Up till now, such an initiative has never been taken, although there may have been some instances in which an investigation would have been useful. And probably also in the future States would feel very reluctant in initiating such intrusive measures, especially with regard to other States implied in armed conflict situations: all the more so if the situation were that of a non-international armed conflict. An investigation system which would plan to be really effective would require the conferral of the power to activate the mechanism on the people affected by the use of chemical weapons and/or on organizations representing their interests. A path that, however, seems extremely unlikely in the near future in a disarmament/IHL treaty;

c) thirdly, a major issue in conducting inspections concerning possible use of chemical weapons in a conflict situation is the one relating to the safety of the inspection team. The team would in fact be possibly exposed to a double risk: the one regarding operation in a conflict situation (if the conflict is ongoing) plus the one connected to operating in a contaminated area (if there is any contamination). Guaranteeing the safety of the inspectors could require a great amount of resources and, as envisaged in the Verification Annex, in case of a very risky situation, it could delay and possibly even prevent the inspection[48];

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[47] See Art. IX, par. 8 and ff., CWC, and Verification Annex, Part XI.

[48] See Verification Annex, Part XI, par. 10: "*Immediately upon the receipt of a request for an investigation of alleged use of chemical weapons the Director-General shall, through contacts with the relevant States Parties, request and confirm arrangements for the safe reception of the team*"; par. 11: "*The Director-General shall dispatch the team at the earliest opportunity, taking into account the safety of the team*"; par. 20. "*If the inspection team deems that safe access to a specific area relevant to the investigation is not possible, the requesting State Party shall be informed immediately. If necessary, the period of inspection shall be extended until safe access can be provided…*".

d) fourthly, challenge inspections run a risk which is common to all inspection systems based on the sending of fact-finding teams operating *in situ*, within the territory of a sovereign State, or anyway within a territory under its control (as the case would usually be): the risk is that a State using chemical weapons could easily prefer to commit a violation of the CWC consisting in refusing cooperation with the OPCW and preventing the inspection team from entering its territory, rather than permitting a verification of its actual non compliance in the use of chemical weapons. Obviously, the refusal to permit an inspection could be perceived as a strong presumption of an effective use of chemical weapons. But, all the same, the impossibility of performing the inspection would render it impossible to ascertain the dimension and the limits of the actual use of chemical weapons and of its effects. A possible solution to such an *impasse* could theoretically be the enforcement of the inspection *manu militari* on the basis of a UN Security Council resolution, adopted under Chapter VII of the Charter[49]: but evidently such a measure could easily prove politically unfeasible.

4. Assistance

Also the assistance provisions in Art. X, CWC, are important, in particular with regard to a possible request by a State Party "*to receive assistance and protection against the use or threat of use of chemical weapons*" (par. 8)[50]. An obligation of assistance falls on both the Organization for the Prohibition of Chemical Weapons (OPCW) and the States Parties, who can choose to pay contributions to a Special Fund administered by the OPCW, or to undertake to provide other kinds of help (par. 7). On one side, these provisions do offer the advantage of introducing an additional indirect method of verification of possible instances of use of chemical weapons. On the other side, however, there are basically two kinds of obstacles that can undermine the efficacy of Art. X, with regard to both its verification and

[49] The CWC provides for appeal by the OPCW organs to the Security Council (or the General Assembly) as a measure of last resort in face of violations of the Convention, "*in cases of particular gravity*": see Art. XII 4. and Art. VIII 36.

[50] As specified in par. 8, Art. X, CWC, a State party may advance such a request "*if it considers that: (a) Chemical weapons have been used against it; (b) Riot control agents have been used against it as a method of warfare; or (c) It is threatened by actions or activities of any State that are prohibited for States Parties by Article I*".

its assistance facets: first of all, the request under par. 8 can only be advanced in a typical "international armed conflict" situation, which is nowadays a not so likely event.

The population victim of a chemical attack from its own Government or from rebels or terrorists fighting against the Government from within the State's territory do not benefit of this mechanism: naturally, nothing prevents the interested State to ask the OPCW or other States for assistance in such a case, but it is not bound to do so, nor do other States have the right (under Article X) to intervene. Secondly, an effective implementation of Art. X requires granting the OPCW adequate funds, not only in order to carry out the necessary research and training activities, which are effectively carried out, but especially, in case of need, to undertake the proper assistance activities, which might be very severely demanding in terms of men, of experience, of technical means for ensuring the safety, in the first place, of the assisting personnel[51].

5. Concluding remarks

The contribution of the CWC, a convention mostly dedicated to disarmament and arms control, to international humanitarian law is undoubtedly one of extreme value. This instrument has strengthened the prohibition of use of chemical weapons, already existent after the 1925 Protocol, by means of its provisions, and by reaching an almost universal acceptance. It has introduced verification and assistance mechanisms in order to ascertain, *inter alia*, violations of the prohibition of use, and to assist victims of a possible use of chemical weapons. The CWC is, however, far from being a perfect instrument: some of its flaws, always connected to the IHL aspects, have been identified above. A part of them are difficult to overcome, being strictly related to some basic characters of the international legal order. However, it is necessary to safeguard and improve the value of the Convention: this will be possible if the fully universal reach of the CWC will be obtained; if certain gaps in the definitions, such as the one concerning the "law enforcement purposes" exception,

[51] According to D. Loye and R. Coupland, "Who Will Assist the Victims of Use of Nuclear, Radiological, Biological or Chemical Weapons – And How?", in *International Review of the Red Cross*, 2007, p. 329 and ff., referring to possible instances of, *inter alia*, chemical warfare, *"… an effective international assistance response which would be of direct benefit to surviving or potential victims and which provides adequate security for staff is not possible at present. To our knowledge, no government, international organization (…), non-governmental organization or collaborative body has either realistic plans or the capacity to mount such an international response"* (p. 343).

will be clarified; if the verification and assistance mechanisms will be further strengthened, and, above all, assigned sufficient funding and support from States Parties in order to be able to operate at their best.

Cristina RODRIGUES
Assistance and Protection Branch
International Cooperation and Assistance Division
Organization for the Prohibition of Chemical Weapons (OPCW)

Ladies and Gentlemen,

First, I would like to thank the International Institute of Humanitarian Law for allowing me to be present at this important Seminar that connects the Chemical Weapons Convention and International Humanitarian Law.

Even if I am just a chemist, I will try to present you with an overview of the work that the Technical Secretariat of the OPCW has been developing concerning assistance and protection under Article X of the Chemical Weapons Convention.

Excellencies, let me go straight to the subject. The role of international humanitarian law (IHL) is to protect people (and goods) in wartime. Its purpose is to limit suffering caused by war by ensuring, as much as possible, protection of the victims. Its measures apply to all parts of the conflict, independent of its reasons; its coverage extends to all armed conflicts, whether they are international or not. However, the international humanitarian law goes beyond limiting war acts and protecting combatants and civilians. It proceeds from the premise that the only legitimate goal of a war is to weaken the opponent's armed potential. Therefore, it prohibits manufacture, use, storage and transfer of weapons which can cause excessive sufferings to combatants and civil populations. In this sense, the objectives of IHL and CWC are perfectly compatible and complementary. Indeed, one of the worst examples of weapons causing excessive sufferings are chemical weapons which are able to endanger the health of men and animals and to contaminate food and water causing suffering without distinction between the military and civilian targets and cause wide and persistence damage.

Let me remember some of the words of Ambassador Pfirter this morning: the Chemical Weapons Convention has four principal objectives: the elimination of chemical weapons and of the capacity to produce them; the verification of chemical non-

proliferation; international cooperation in the peaceful uses of chemistry; and international assistance and protection in the event of the use or threat of use of chemical weapons.

By joining the CWC, States Parties renounce any chemical weapons option in conflict. In return, each State Party has the right to request and to receive assistance and protection against the use, or threat of use, of such weapons. Furthermore, States Parties have the right to request the Technical Secretariat of the OPCW for expert advice and assistance in identifying how their programmes for the development or improvement of a protective capacity against chemical weapons could be implemented. These two objectives of national capacity building of Member States and international capacity building in the OPCW constitute the principles embodied in Article X of the Convention. The provisions of this positive security guarantee will be an indispensable part of the Convention for as long as chemical weapons exist, for as long as there are States that remain outside the Convention, and for as long as the threat of the use of these weapons by terrorist groups continues to cast a shadow over our lives.

Let me now say a few words about one of those four principal objectives of the CWC- assistance and protection in the event of the use or threat of use of chemical weapons. Despite the importance of verification, compliance with a disarmament treaty cannot rest on inspections alone. States Parties also need to be confident that their security will not be treated by chemical weapons. As you all know, according to the CWC, any State Party to it, that might face the use or threat of use of chemical weapons or riot control agent used as a method of chemical warfare or treated by actions of other State, prohibited by Article I, has the right to request assistance of the OPCW. Such assistance may include the provision of defensive equipment such as chemical agents detector, protective clothing, decontamination equipment, medical help and antidotes, expert advice on protective measures.

In return to ensure transparency each SP must provide the OPCW with it annual information on its existing protective programmes. Until now 116 Member States have fulfilled their obligation at least once and in the last year 64 Member States provided the TS with this information.

All States Parties are also obliged to provide assistance through the Organisation by choosing one or more of three of the following measures:

a) to make a financial contribution to the Voluntary Fund for assistance (44 Member States);

b) to conclude a bilateral agreement with the OPCW specifying the kind of assistance they would be able to deliver on demand; or simply to declare the kind of assistance which they would be able to provide in response to an appeal by the Organisation.

On its part the TS of OPCW, often in cooperation with donor States, has been actively involved in helping the Member States to establish or increase their capacity to protect themselves from chemical weapons. For example, in 2007 alone, six Member States benefited from such bilateral technical assistance projects as training of national experts and provision of equipment and expert advice, medical training, transfer of technical expertise and protective equipment. Two States Parties received assessment visits from TS and where assisted with the evaluation of their protection needs. During the same period, ten international or regional protection courses where organized by those of our Member States which placed their training facilities and expertise at the disposal of the OPCW.

What are now the challenges for the future concerning Article X of the Convention: a full implementation of paragraph 4. This information can be used by the TS to provide a view of the needs of the Member States concerning protection against chemical weapons. The Secretariat is also evaluating the assistance offers made in order to identify gaps, redundancies, incompatibilities and to help minimize the resource requirements for the OPCW; the balance in the geographic distribution of the offers of assistance under paragraph 7 is needed since the majority of this offer comes from Europe; and there is a need to check the liability and serviceability of the offers because most of them where presented ten years ago. The enhancement of the capability and readiness of the TS to provide assistance under Article X is also one of our objectives. For this the TS has participated in several exercises in cooperation with other major organisations also involved in the delivery of assistance. A good example of this was the Joint Assistance exercise held in Lniv, Ukraine in 2005. The TS is now searching for a partner for hosting another of these exercises before the end of 2009.

To conclude let me just remember that all the provisions of Article X of the CWC have direct bearing on the capacity of Member States to deter and withstand attacks against

themselves with chemical weapons and to deal with the aftermath of any attacks. Their effective implementation can considerably reduce the impact of chemical weapons, in case of their use by terrorists, and can thus save human lives and minimize suffering.

Thank you for your attention.

Michel VEUTHEY

IIHL Vice-President; Associate Professor, University of Nice-Sophia Antipolis

We shall deal with the issue of "*Chemical Weapons and Customary International Humanitarian Law*" [52] in the following way:

- first in reference to customs of war in history; and then
- with regard to contemporary customary international humanitarian law.

1. Customs of war: some references in history

[52] The author would like to thank Ms Anne Quintin for editing the final text of this short article.

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Customs of war in many civilizations excluded the use of poison against enemies in war:

- Ancient Rome did forbid the use of poison in war: *"Armis bella non venenis geri"* ("War is waged with weapons, not with poison");
- In India, the "Laws of Manu" included this rule: *"When the king fights with his foes in battle, let him not strike with weapons concealed in wood, nor with such as are barbed, poisoned, or the points of which are blazing with fire"*;[53]
- In the Islamic tradition, the laws of war forbade the use of poisoned arrows or the application of poison on weapons such as swords or spears[54]
- Hugo Grotius, in The Right of War and Peace (Book III, XV.1), writes:

"XV.1. By the Law of Nations it is forbidden to kill any by Poison. As the Law of Nations permits many Things, in the Sense we have explained which are forbidden by the Law of Nature, so it prohibits some Things allowed by this Law of Nature. For if we respect the Law of Nature, when it is permitted to kill a Man, it signifies not much, whether we do it by the Sword or Poison. I say the Law of Nature, for indeed, it is more generous to attempt another Man's Life in such a manner, as to give him an Opportunity of defending himself, but we are under no Obligation to use such Generosity towards those who deserve to die. But the Law of Nations, if not of all, yet of the more civilized, allows not the taking the Life of an Enemy, by Poison; which Custom was established for a general Benefit, lest Dangers should be increased too much, since Wars were become so frequent. And it is probable, that it was first introduced by Kings. For if their Life be more secure, than that of others, when attacked only by Arms; it is, on the other Hand, more in danger of Poison, unless protected by a regard to some Sort of Law, and the fear of Disgrace and Infamy."

2. Livy speaking of Perseus, calls it a clandestine Villany. Claudian of the Offer of Pyrrhus's Physician to poison him rejected by Fabricius, calls it an abominable Action; and Cicero hinting at the same Story terms it a Crime. It concerns the common Interest of Nations, that no such Examples be given, say the Roman Consuls, in their Letter to Pyrrhus, which Gellius recites out

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[53] Nr. 90

[54] ICJ Dissenting Opinion by Judge Weeramantry, p. 10576 See N. Singh, *India and International Law*, op. cit., p. 216. j7 Qur'an, 11.205. 78 Ibid., LXXVII.8 ; emphasis added. j9 S. R. Hassan, *The Reconstruction of Legal Thought in Islam*, 1974, p. 177. See, generally, Majid Khadduri, *War and Peace in the Law of Islam*, 1955. For a brief summary of the Islamic law relating to war, see C. G. Weeramantry, *Islamic Jurisprudence: An International Perspective*, 1988/1996

of Cl. Quadrigarius; and Val. Maximus observes, Wars should be waged by Arms, not by Poison. And Tacitus relates, that when the Prince of the Catti offered to poison Arminius, Tiberius refused it, imitating by that glorious Action the Conduct of antient Generals. Wherefore they that hold it lawful to poison an Enemy (as Baldus did upon the Authority of Vegetius) do regard the mere Law of Nature, but over-look that Law which is established by the Consent of Nations.

XVI. Or to empoison Waters or Weapons.

XVI.1. Somewhat different from this manner of poisoning (as having something of open Force in it) is to poison the Heads of Darts, and thereby force Death a double way, which Ovid says was much practised by the Getes, Lucan by the Parthians, and Silius by some of the Africans, and Claudian particularly by the Ethiopians. But this also is contrary to the Law of Nations, tho' not of all, yet of the European, and others civilized like them, which is rightly observed by Johannes Salisberiensis, whose Words are these: Neither do I find the Use of Poison allowed by any Law, tho' sometimes practised among Infidels. Therefore Silius calls it, to render Arms infamous by Poison.

2. So also the empoisoning of Springs (which cannot be concealed, or at least not long) Florus declares to be contrary not only to the Custom of the antient Romans, but also to the Laws of the Gods; for the Antients frequently ascribed to the Divinity the Rules of the Law of Nations, as I have elsewhere observed; neither should it seem strange, that there are such tacit Agreements among Nations, in order to lessen the Dangers that attend Wars, when of old it was agreed between the Chalcidians and Eretrians during the War, "Μὴ χρῆσθαι τηλεβόλοις", Not to make use of Darts.

XVII. But not any other ways to corrupt the Waters.

XVII. But it is not the same, when Waters are (without Poison) so corrupted, that they cannot be drunk, which Solon, and the Amphictyones approved against the Barbarians. Oppianus, of Fishing, declares it was commonly done in his Time; it being, in Effect, the same Thing as if the Current of a River were turned, or The Veins of a Spring cut off, which, by the Law of Nature, and the general Consent of Nations, are allowed." [55]

[55] Hugo GROTIUS, *The Rights of War and Peace*, edited and with an Introduction by Richard Tuck, from the edition by Jean Barbeyrac, Vol. 3, Chapter IV, "The Right of killing Enemies in a solemn War; and of other Hostilities committed against the Person of the Enemy" Indianapolis, Liberty

- The Lieber Code (Instructions for the Government of Armies of the United States in the Field. 24 April 1863 - "General Order 100"), at its Article 70, states: "*The use of poison in any manner, be it to poison wells, or food, or arms, is wholly excluded from modern warfare. He that uses it puts himself out of the pale of the law and usages of war*"[56]
- The Declaration of Brussels (1874)[57] reaffirms this prohibition:"*Art. 13. According to this principle are especially forbidden : (a) Employment of poison or poisoned weapons*"
- So does the Oxford Manual (1880) in its Art. 8:"*It is forbidden:(a) To make use of poison, in any form whatever*"
- and the Oxford Manual of Naval War (1913) at its Art. 16:"*In addition to the prohibitions which shall be established by special conventions, it is forbidden:(1) To employ poison or poisoned weapons, or projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases.*"

2. Contemporary customary international humanitarian law

Contemporary customary international humanitarian law also prohibits the use of chemical weapons.

The 1907 Hague Regulations - recognized as customary by the International Military Tribunal at Nuremberg in 1946 - forbid the use of poison or poisoned weapons:"*In addition to the prohibitions provided by special Conventions, it is especially forbidden(a) To employ poison or poisoned weapons.*"[58]

The 1925 Geneva Protocol, in its preamble, reaffirms the condemnation and prohibition of chemical weapons:"*The undersigned Plenipotentiaries, in the name of their respective Governments:*

Whereas the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids materials or devices, has been justly condemned by the general opinion of the civilized world;

Fund, 2005. Available online at: http://oll.libertyfund.org/

[56] « Instructions for the Government of Armies of the United States in the Field » available online: http://fletcher.tufts.edu/multi/ texts/historical/LIEBER-CODE.txt

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[58] Article 23, Convention (IV) respecting the Laws and Customs of War on Land and its Annex: Regulations concerning the Laws and Customs of War on Land. The Hague, 18 October 1907.

and Whereas the prohibition of such use has been declared in Treaties to which the majority of Powers of the world are Parties; and

To the end that this prohibition shall be universally accepted as a part of International Law, binding alike the conscience and the practice of nations;Declare:

That the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration."[59]

In 1969, a majority of the United Nations General Assembly recognized that "*the Geneva Protocol embodies the generally recognised rules of international law prohibiting the use in international armed conflicts of all biological and chemical methods of warfare, regardless of any technical developments.*" In particular, it declared "*as contrary to the generally recognised rules of international law […] the use in international armed conflicts of: (a) any chemical agents of warfare – chemical substances, whether gaseous, liquid or solid – which might be employed because of their direct toxic effects on man, animals or plants […]*"[60]

Twenty years later, Theodor Meron, in *Human Rights and Humanitarian Norms as Customary Law*, acknowledges the customary character of the 1925 Geneva Protocol:"*The ban on the use of chemical weapons, as codified in the 1925 Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and Bacteriological Methods of Warfare (1925 Protocol), is considered to constitute customary international law, applicable to all States regardless of whether they are parties to the protocol."*[61]

In 1998, the International Criminal Court Statute includes chemical warfare in the list of "*serious violations of the laws and customs applicable in international armed conflicts":*

1. The Court shall have jurisdiction in respect of war crimes in particular when committed as part of a plan or policy or as part of a large-scale commission of such crimes.

2. For the purpose of this Statute, 'war crimes' means:

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[59] Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare. Geneva, 17 June 1925.

[60] UNGA resolution 2603 A (XXIV), dated 16 December 1969. Quoted by Lisa TABASSI. "Impact of the CWC: Progressive Development of Customary International Law and Evolution of the Customary Norm against Chemical Weapons". *The CBW Convention Bulletin (Quarterly Journal of the Harvard Sussex Program on CBW Armament and Arms Limitation*, Issue No 63, March 2004, p. 2

[61] MERON, Theodor, *Human Rights and Humanitarian Norms as Customary Law*, Clarendon Press, Oxford, 1989, pp. 68-69

(b) Other serious violations of the laws and customs applicable in international armed conflict, within the established framework of international law, namely, any of the following acts: - (xvii) Employing poison or poisoned weapons; - (xviii) Employing asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices[62]

The *International Committee of the Red Cross (ICRC) Study on Customary International Humanitarian Law*, published in 2003, reaffirms the customary character of the prohibition of use of chemical weapons.According to customary international humanitarian law which is binding on all States and on all Parties to an armed conflict, the use of biological and chemical weapons is prohibited.

This norm is based on the ancient taboo against the use in war of "*plague and poison*", which has been passed down for generations in diverse cultures. It was most recently codified in the 1925 Geneva Protocol and subsequently in the 1972 Biological Weapons Convention and in the 1993 Chemical Weapons Convention. The great majority of States are Parties to these three treaties. The prohibitions based on these texts cover not only the use, but also the development, production and stockpiling of biological and chemical weapons.

It should be emphasized that in situations of armed conflict this absolute prohibition applies to all biological and chemical agents, whether labelled "lethal" or "non-lethal". For example, even the use of riot control agents which is permitted for domestic riot control purposes is prohibited in situations of armed conflict.In the "General principles on the use of weapons", the ICRC explains the reason of this prohibition. The general principles prohibiting the use of weapons that cause superfluous injury or unnecessary suffering and weapons that are by nature indiscriminate were found to be customary in any armed conflict. In addition, and largely on the basis of these principles, State practice has prohibited the use (or certain types of use) of a number of specific weapons under customary international law: poison or poisoned weapons; biological weapons; chemical weapons; riot-control agents as a method of warfare; herbicides as a method of warfare.[63]

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[62] Article 8 ("War Crimes")

[63] HENCKAERTS, Jean-Marie, "Study on customary international humanitarian law: A contribution to the understanding and respect for the rule of law in armed conflict", *International Review of the Red Cross,* Vol. 87, N° 857, March 2005, p. 193

Rules 70 to 76, applicable in international and non-international armed conflicts, reaffirm the fundamental principles of international humanitarian law:- Rule 70. The use of means and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering is prohibited. - Rule 71. The use of weapons which are by nature indiscriminate is prohibited.- Rule 72. The use of poison or poisoned weapons is prohibited. - Rule 73. The use of biological weapons is prohibited.- Rule 74. The use of chemical weapons is prohibited.- Rule 75. The use of riot-control agents as a method of warfare is prohibited.- Rule 76. The use of herbicides as a method of warfare is prohibited if they:

a) Are of a nature to be prohibited chemical weapons;

b) Are of a nature to be prohibited biological weapons;

c) Are aimed at vegetation that is not a military objective;

d) Would cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which may be expected to be excessive in relation to the concrete and direct military advantage anticipated; or e) Would cause widespread, long-term and severe damage to the natural environment.

This long list of customary rules prohibiting the use of chemical weapons in armed conflicts shall be complemented by the Martens Clause: "*Until a more complete code of the laws of war has been issued, the High Contracting Parties deem it expedient to declare that, in cases not included in the Regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized peoples, from the laws of humanity, an the dictates of the public conscience.*"

3. Open questions

Even with a long (old) history and a long (impressive) list of customary rules prohibiting chemical weapons; we are left with a long (and disturbing) list of open questions:

- There seems to be a clear prohibition of the first use and no agreement on the second use. (Are reprisals allowed?)
- Riot-control agents are prohibited in armed conflict, but not in other situations. The question then is: where is the threshold between armed conflicts and other

situations, such as internal strife? The answer could be more complex as we could have different scopes of application in the same conflict.

- CWC prohibits the use, production and stockpiling; IHL only prohibits the use
- Chemical industrial accidents (Bhopal) cause more casualties than chemical terror (Aum in Tokyo)
- Who - of Big Powers (USA, Russia) or non-State actors (private military companies, private security companies, terrorists) - is more likely to use chemical weapons?
- Should riot-control agents be used in Peace Keeping Operations?

4. Conclusion

As many essential questions seem to be left open by international law, be it for Governments or for non-State actors, should we not go back to the customary rules prohibiting such weapons? And in cases which have not been envisaged by contemporary law, have recourse to the Martens Clause and to public conscience?

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Concluding remarks

1. The starting point is the universality of the CWC. If we compare the 151 States Parties of the First Review Conference and the 183 Parties of the Second we may conclude that the CWC has reached a quasi-universality standard and the task is now to convince the recalcitrant States to adhere. They are concentrated in the Middle East.

An important question is whether the political environment surrounding arms control and disarmament has deteriorated in comparison with the one existing at the time of the First Review Conference. There are signs that confidence is eroding. There are many local and unresolved conflicts in the world. As far as WMD treaties are concerned, this climate change is mostly connected with the NPT. BW and CW Conventions are a different story. While it was not possible to achieve a protocol on verification for BW, this had been possible since the beginning for CWC. It is the responsibility of States Parties to keep the CWC success story alive.

Is it correct to put NW, BW and CW in the same basket? All the three categories are labelled as WMD. However, the approach to their regulation should be different for a number of reasons:

- Usually States are not interested in possessing CW;
- Possession of CW does not enhance the status of a country in the international and regional arena, albeit nuclear weapons;
- In principle, CW has no military utility.

However, this last proposition should be tested against new wars and the possible use of CW, since they are easy to produce or acquire. CW availability and accessibility are factors to be taken into account. Progress in science and technology should also be monitored, since it may help to circumvent the CWC prohibition, in particular in the field of non-lethal weapons.

2. Since the Second Review Conference is to be convened in a few days, one has to ask whether review conferences are useful and necessary. They have become a permanent feature of disarmament treaties and are now a useful tool for other kinds f treaties. In commenting on role of review conferences an author stated, a number of years ago, that they were cumbersome and not very useful. This opinion should be rejected since review conferences:

- play a confidence-building role. They may be considered as a kind of confidence-building mechanism, as treaty parties meet and exchange their views;
- keep record of the implementation of each treaty provision;
- stimulate the debate among States Parties and in so doing help in clarifying controversial issues.
- help in preventing the naissance of controversies and/or quelling their exacerbation.

This said, one has to point out that review conferences are not revision conferences. However, they help in maintaining the treaty in keeping with the evolution of the situation. This is important, for instance, for the definition of CW, which might be object of contention because of technological development. The added value of review conferences also consists in reaffirming the importance and permanent role of the treaty under review, even if the security environment is deteriorating. For the CWC, the Review Conference should underline its comprehensiveness and the absence of lacunae and loopholes. The general approach is to take stock of results achieved and look ahead.

3. Challenges to the CW disarmament regime should not be underestimated even though they are less dangerous than those facing the NPT.

Is the development of dual-use technology a real threat or is the current verification and compliance system a stumbling block against circumventing duties stemming from the CWC? Is there a danger of a resurgence of CW because of dual-use technology? Is the "general purpose criterion", according to which any hostile use of toxic chemical is prohibited, a real shield protecting parties against any technological development? The other challenge is represented by non-State actors. Unlike NW, whose danger of use by non-State actors is perceived unlikely or very remote, CW are a different story.

Non-lethal chemicals have been used by private military companies (PMC) in a recent conflict and there is a risk of a repetition in situations of military occupation and/or non international armed conflict. States employing PMC should ensure that forbidden chemicals are not used. In this connection one should also tackle counter-terrorism operations, being obvious that CW cannot be used even for that purpose as the CWC forbids their use under any circumstances. A balance should be struck between chemicals forbidden by CWC and agents employed for law enforcement, including riot control purposes.

The tasks entrusted to the Scientific Advisory Security Board for reviewing scientific and technological developments that could affect the operation of CWC are essential.

4. The pace of destruction is slow and a number of experts speculate that it will be difficult to meet the new extended deadline of 2012. Almost 65% of CW should still be destroyed. Technical problems cannot be underestimated, first of all the availability of facilities for destruction. There is still a lot of work to be done. What should States do? When should they act to meet the problem? A strong political message is needed and, for instance, a conference of States Parties may be convened in order to take stock of where we are and to delineate appropriate solutions.

5. Verification is another important item. There are a number of facilities which are of potential use for producing CW. Therefore, also those facilities should be inspected and the

deficiencies overcome. There is a need to maintain verification instruments in keeping with progress in science and technology. A number of ambiguities still exist, for instance the distinction between biological and chemical substances and the problem of declarations. Challenge inspections are not used. The regime is thus loosing credibility. A proposal has been done to use challenge inspections to tackle ambiguities, rather than using them for outright violations of the CWC. The problem is that challenge inspections may be triggered only by States Parties and this renders them a source of potential conflict. New solutions should be found out taking into account the practice of other bodies, for instance those related to the human rights treaties.

6. National implementation of the CWC should be attentively monitored. Signing and ratifying a treaty is not enough. The treaty should be implemented at the national level and this task should be kept in keeping with scientific progress. National implementation is a never-ending process. The situation in several countries is not totally good. For instance a number of States has not yet designated their national authorities.

7. As noted at the beginning, universality of the CWC is almost complete. There are 183 States Parties and their number has increased since the First Review Conference. A few States are not Parties and Middle East remains the most critical area. Non ratification creates concern for stability in the Mediterranean and Middle East. The Security Council has the authority and means for addressing this issue in a proper way. For instance, SC Res. 1718 (2006) is concerned with shipment of WMD and related materials to North Korea and asks States to take appropriate action. Politically there is a close interaction between WMD treaties and in this respect several proposals have been advanced, including the creation of a zone free of WMD. A political effort should be exerted and a well-designed strategy is needed in order to prod the CWC ratification by those countries which are still outside: less than a dozen States. It is possible that Iraq and Lebanon will join the Treaty soon. The First Review Conference recalled the advantages of becoming party to the CWC in terms of security and economic co-operation. Those terms should again be reaffirmed by the Second Review Conference.

8. A neologism has been coined for addressing disarmament treaties: humanitarian disarmament. In effect, modern disarmament treaties are both disarmament and humanitarian law. The provisions on humanitarian law are contributing to the development of the customary law on prohibiting that class of weapons. This is important for:

- all WMD treaties contain a withdraw clause allowing an easy treaty denunciation. The provisions that are declaratory of customary international law continue to be obligatory even if a State has denounced the treaty;
- in time of war, the maintenance into operation of the WMD treaties between belligerents become critical. The provisions of humanitarian law, in so far as they are customary law, apply also in wartime: the use of CW is forbidden;
- the CWC prohibits reprisals. Is this provision declaratory of customary international law? Are belligerents forbidden to retaliate in kind if the treaty regime established by CWC collapses?

States Parties to CWC are prohibited to produce and stock CW and deterrence using CW is not permitted. What about States not parties to the regime? Are they forbidden to possess CW to deter potential enemies or would this imply a violation of the norm on the threat of force? The ICJ in its 1996 Advisory Opinion addressed the question of deterrence by NW but it did not take into consideration the other WMD, since it was not asked to answer on that point.

Another important aspect of the regulation of CW is related to the criminality of their use. Article 8 of the International Criminal Court Statute, employing language drawn by the 1925 Geneva Protocol, qualifies the use of CW as a crime of war.

Last but not least, there are the CWC provisions on assistance and protection against CW. Relief and protection is usually provided for by instruments of humanitarian law. For disarmament treaties is quite a novelty if one considers the encompassing nature of CWC Article 10 and the ability of the Technical Secretariat to be present world-wide in a few hours. This represents a comparative advantage in respect to the other disarmament treaties.

9. In conclusion, the CWC is the most significant achievement in the context of disarmament and humanitarian law. It is up to the Parties and to the organs established by the Convention to exert their best efforts in order to achieve the goal of universality, to influx new life for maintaining the CWC in keeping with the technological progress, and to impede any circumvention of the obligation not to produce or use CW.

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PRINCIPAL ABBREVIATIONS

ARCAT	Advanced RCA Technology
BMA	British Medical Association
BWC	Biological Weapons Convention
CASD	Centro Alti Studi per la Difesa
CBW	Chemical and Biological Weapons
CD	Conference on Disarmament
CSCE	Commission on Security and Co-operation in Europe
CTBT	Comprehensive Test Ban Treaty
CW	Chemical Weapons
CWC	Chemical Weapons Convention
EU	European Union
ICC	International Criminal Court
IC J	International Court of Justice, in the Hague
ICRC	International Committee of the Red Cross
IHL	International Humanitarian Law
IIHL	International Institute of Humanitarian Law
IUPAC	International Union of Pure and Applied Chemistry
LEPs	Law Enforcement Purposes
NATO	North Atlantic Treaty Organization
NLW	Non Lethal Weapons
NPT	Non-Proliferation Treaty
NW	Nuclear Weapons
OCPF	Other Chemical Production Facilities
OCSE	Organizzazione per la Cooperazione e lo Sviluppo Economico
OPCW	Organisation for the Prohibition of Chemical Weapons
OSCE	Organization for Security and Co-operation in Europe
PMC	Private Military Companies
POW	Prisoner of War
PTBT	Partial Test Ban Treaty

RCA	Riot Control Agents
SIOI	Società Italiana per l'Organizzazione Internazionale
SP	State Parties
UN	United Nations
UNGA	United Nations General Assembly
UNMOVIC	United Nations Monitoring, Verification and Inspection Commission
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNSC	United Nations Security Council
UNSCOM	United Nations Special Commission
WHO	World Health Organization
WMD	Weapons of Mass Destruction