

BAN KI-MOON
The UN Secretary-General's
address

MULTIPLE USES OF CHEMICALS
Innovation, science and security

**HIGHLIGHTS FROM THE
GENERAL DEBATE**
Third Review Conference

OPCW

Today

Volume 2 No. 4 ♦ July 2013
www.opcw.org



The Third Review Conference

8 - 19 April 2013



ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS

OPCW Today Impressum

OPCW Today is published twice a year and distributed without charge to readers interested in the OPCW and the peaceful uses of chemistry.

Articles and extracts from articles appearing in *OPCW Today* may be freely used elsewhere provided that the material is reproduced verbatim and acknowledgement of its source is made. However, if the attribution indicates that the author is not an OPCW staff member, permission to republish other than for the use of review must be sought from the author or originating organisation. Views expressed in any signed article appearing in *OPCW Today* do not necessarily represent those of the OPCW and the OPCW accepts no responsibility for them.

***OPCW Today* is produced by:**

Organisation for the Prohibition of Chemical Weapons

Johan de Wittlaan 32

2517 JR The Hague

The Netherlands

Tel: +31 (0) 70 416 3000

Fax: +31 (0) 70 416 3044

E-mail: journal@opcw.org

Website: www.opcw.org

Editorial Group: Attila Zimonyi, Alexander Kelle, Daniel Feakes

Contributors from the Technical Secretariat: Jonathan Forman, Tatsuya Abe, Pankaj Sharma

Photography: Henry Arvidsson, Eric Vander Borght

Production: Keith Powell

Production Assistants: Asli Dinc, Andres Franco

Printing: OPCW Reprographic Centre

Table of Contents

- **Foreword by the Director-General**4
- **United Nations Secretary-General:
Remarks to the Third Review Conference**5
- **Opening Statement by the Director-General
at the Third Review Conference**8
- **OPCW in Review: The Past Five Years**11
- **Perspectives from the Chairs**13
- **Highlights from the general debate at the Third Review Conference**14
- **New and emerging issues at the Third Review Conference**17
- **The Third Review Conference discusses the International
Cooperation and Assistance Programme of the OPCW**20
- **Images from the Third Review Conference**21
- **Video Interviews from the Third Review Conference**24
- **The Scientific Advisory Board during the Third Review Conference
and beyond**25
- **The multiple uses of chemicals: innovation, science and security**28
- **Side Events**29
 - Strengthening the Global Norm Against Chemical Weapons29
 - Legacies of Chemical Weapons30
 - Open Forum31

www.opcw.org

Foreword by the Director-General

Greeting the entry into force of the Chemical Weapons Convention sixteen years ago, the then Secretary-General of the United Nations called it ‘a momentous act of peace’. Secretary-General Ban Ki-moon attending the Third Review Conference — the first time a head of the United Nations has attended a Review Conference — stated that the OPCW demonstrates that the ‘inhumanity of war can give rise to the humanity of solidarity’.

The Third Review Conference, which concluded this April, has reconfirmed these verdicts. It was a landmark event and a resounding success, with deliberations conducted in keeping with our distinguishing tradition of consensus and an exemplary spirit of multilateralism.

Representatives of 122 States Parties assembled in The Hague for an extensive dialogue on a range of issues important to the regime against chemical weapons, and gave to the world a statement of their renewed commitment to the ideals of the Convention.

The outcome document is both a review and a visionary set of strategic priorities for the future. It duly recognizes both the accomplishments of the OPCW, and the challenges which it faces. It expresses the belief of the States Parties in the Convention as an uncompromising global norm.

The document is an expression of resolve towards the continuing role of the Convention and its institutional apparatus as the world’s vanguard against the threat of chemical weapons. There is a desire in the outcome document for us to be constantly mindful of our responsibilities, of our place as a global repository of knowledge and expertise on chemical disarmament and of emerging developments in science and technology.

The Conference reiterated its deep concern that chemical weapons may have been used in the Syrian Arab Republic, and the Organisation will continue to work closely with the Secretary-General in this regard.

There is profound awareness that we are at a crossroads in our history. Nearly 80% of all declared stockpiles of Category 1 chemical weapons have been destroyed. Global zero on chemical weapons is well within our reach.

States Parties at the Review Conference reaffirmed the important consensus on destruction

But the dream of a world free of chemical weapons is contingent upon more than just demilitarisation. The elimination of weapons will only do away with declared stockpiles. It is our clear mandate, in fact, to rid all succeeding generations of even the fear of chemical weapons.



“ There is a profound awareness that we are at a crossroads in our history, with global zero on chemical weapons well within our reach. ”

A wide sense of global ownership in our enterprise is crucial, and in this regard, we were pleased to welcome extensive multi-stakeholder involvement and the participation in the Third Review Conference of 47 representatives of civil society.

The Chemical Weapons Convention was a promise we made, not only to the world it was born in, but to all generations to come, that never again would war be waged with poison as a sinister weapon.

The Convention is the voice of our collective abhorrence of chemical weapons – after Somalia’s accession, the collective voice of 189 states. The Review Conference called, in unequivocal terms, upon states not yet party to join the prohibition without delay or preconditions.

We were scarred, as a global civilisation, by the carnage of chemical war, wherever and whenever it was waged in our history. The chemical weapons ban was forged, and draws its strength, from the painful memory of those tragedies. While we take pride in all that the regime has achieved, our work shall carry on ceaselessly until chemical disarmament has been achieved and until the norm against chemical weapons becomes integral to all our deliberations on international peace and security.

As the Technical Secretariat now embarks upon a process of identifying practical steps towards the implementation of the Third Review Conference outcome document, I reiterate my fullest confidence in the international community’s resolve to see to full fruition every facet of the Convention. The Convention remains, as it began, a momentous act of peace.

Ahmet Üzümcü
OPCW Director-General

United Nations Secretary-General: Remarks to the Third Review Conference

Following are UN Secretary-General Ban Ki-moon's remarks to the Third Review Conference of States Parties to the Chemical Weapons Convention, in The Hague on 8 April:

I am very pleased to join you for this Third Review Conference of the States Parties to the Chemical Weapons Convention. I am honoured to be the first United Nations Secretary-General to attend a review conference of this landmark treaty.

We meet at a critical time and I wanted to be here to extend the full support of the United Nations to the work of the Organization for the Prohibition of Chemical Weapons.

I also want to commend the Government of the Netherlands for its valuable contributions to advancing the rule of law in the field of disarmament and non-proliferation. That leadership will be further recognized and strengthened when the Government of the Netherlands hosts the 2014 Nuclear Security Summit here in this very building.

Excellencies,
Ladies and gentlemen,

Last October, many of us came together at United Nations Headquarters to celebrate the fifteenth anniversary of the entry into force of the Chemical Weapons Convention.

I called on all countries to work together to eliminate the threat posed by chemical weapons for all people and for all time.

All of us there made it clear that there can be no compromise on the road to ensuring a world forever free of chemical weapons. I am here today to reiterate my conviction about the important role of the OPCW on that journey.

Together, we must ensure that the fog of war will never again be composed of poison gas.



“ Nothing can justify the possession of this heinous category of weapons of mass destruction. Nothing. ”

But let us be clear-eyed about the challenge. There are many lessons to learn and gaps to fill if we are to rid the world of chemical weapons.

Thanks to the efforts of so many here in this room and around the world, eighty per cent of the declared chemical weapons stockpiles have been destroyed.

I commend those countries that summoned the courage to declare their possession of chemical weapons and live up to their commitment to eliminating them.

I also take note of an agreement on the final extended deadline for the destruction of chemical weapons stockpiles. It is my sincere hope that we reach the 100% target mark by the next

review conference.

Progress in achieving the total destruction of chemical weapons must be complemented by efforts to gain universal adherence to the Convention.

Eight countries remain outside of the Convention – Angola, the Democratic People’s Republic of Korea, the Arab Republic of Egypt, Israel, Myanmar, Somalia, South Sudan, and the Syrian Arab Republic.

I once again call upon each and every one of these countries to join the rest of the international community without further delay. I urge all of you who are in a position to do so to show political leadership and encouraging these countries to join the Convention.

Nothing can justify the possession of this heinous category of weapons of mass destruction. Nothing.

We know that until the last stockpiles have been destroyed – and until the Convention is binding worldwide – the threat posed by chemical weapons will remain.

Look no further than today’s headlines.

The crisis in Syria has entered its third year, without seeing any prospect for a political solution, of horrendous violence and devastating humanitarian consequences. The alarming claims concerning the use of chemical weapons are a further sign of deterioration.

As I have said many times, the use of chemical weapons by any side under any circumstances would constitute an outrageous crime with dire consequences, and a crime against humanity.

Syria requested a specialized and independent United Nations investigation into allegations that chemical weapons were used near Aleppo.

Other Member States brought to my attention additional locations where chemical weapons were allegedly used and requested me to investigate those incidents.

My position is clear: All serious claims should be examined without delay, without conditions and without exception.

After consulting with the OPCW and the World Health Organization, I established a technical mission led by experts. Yesterday I met the head of our team, Mr. Åke Sellström. He assured me that he and his colleagues are ready to deploy. I have been urging the Syrian authorities to ensure that in the days ahead, the team can travel to Syria with full cooperation.

This would be the first probe of allegations of the use of weapons of mass destruction in the 21st century.

I believe an investigation into the possible use of chemical weapons anywhere will help deter the future use of chemical weapons everywhere.

I count on your continued strong support – and I once again emphasize the responsibility of Syrian authorities to assure the international community of the security of its chemical weapons stockpiles.

Let me reiterate my conviction: As long as chemical weapons exist, so, too, does the risk of their use – by accident or design.

There are no right hands for the wrong weapons.

Excellencies, Ladies and Gentlemen,

As we confront immediate challenges, we are also here to look ahead and lay foundations for the future. Over the next two weeks, you will work to strengthen the mission of the OPCW.

And you will anticipate future challenges.

At this critical juncture, I urge you to focus on three issues.

First, build on the Convention's achievements and ensure that it remains an effective bulwark against the re-emergence and proliferation of chemical weapons, including to terrorists.

Second, build a stronger partnership with the chemical industry.

We must do our utmost to address concerns over safety and security associated with poisonous chemical agents while also reaping the tremendous technological and economic benefits that chemicals can make possible.

Today more than 130 chemical enterprises are participating in the UN Global Compact, our corporate citizenship and sustainability initiative. They have pledged to contribute to a better world socially, environmentally and economically.

Promoting international cooperation in the peaceful uses of chemistry is key to the successful future of the OPCW.

Third, strengthen your ability to contribute to peace and security. The OPCW is equipped with a robust and reliable monitoring and verification mechanism. With that expertise, your Organization can play a constructive role in the process of establishing a Middle East zone free of nuclear weapons and all other weapons of mass destruction.

Let me take this opportunity to express my sincere hope that that important conference convene without further delay.

Excellencies,
Ladies and gentlemen,

We gather nearly 100 years after the first chemical



**“ As long as chemical weapons exist,
so, too, does the risk of their use
— by accident or design.
There are no right hands for
the wrong weapons. ”**

attack, which took place just 250 kilometers from here. The memory of the defenceless victims of those awful events in Ypres, Belgium, remains fresh in our minds.

So does the memory of many other innocent people who were attacked with chemical weapons in the fields of Iran and Iraq, in the subways of Tokyo and elsewhere.

Like the United Nations, the Chemical Weapons Convention was born from a fundamental abhorrence at the atrocities of war.

You have a specific task – to eliminate chemical weapons and prevent them from ever re-emerging. But you also have a broad mission – to prove that the inhumanity of war can give rise to the humanity of solidarity. To show that the lust for military dominance can be tamed by a

love of life. And to demonstrate that the depths of despair caused by chemical weapons can be overcome by international cooperation of the highest order.

The OPCW has greatly strengthened the rule of law in the field of disarmament and non-proliferation. I strongly believe your success story will inspire other parts of the global disarmament machinery to live up to the expectations of the international community.

The United Nations stands with you as you fulfil the noble aims of the Chemical Weapons Convention. Ladies and gentlemen, let us work together to make this world free of chemical weapons and weapons of mass destruction. I wish you great success.

Thank you.

Opening Statement by the Director-General at the Third Review Conference

Mr Secretary-General,
Mr Chairman,
Excellencies,
Distinguished delegates,

I convey to you my warmest welcome to the Third Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention.

I congratulate Ambassador Krzysztof Patulej of Poland on his well-deserved election to chair this Conference and assure him of the full support of the Technical Secretariat.

The OPCW is honoured to welcome the Secretary-General of the United Nations, Mr Ban Ki-moon. His presence among us today is a testament to his strong commitment to disarmament and to our work. “The world is over-armed, and peace is underfunded”: this has been his rallying call to the path of disarmament.

The Chemical Weapons Convention serves the goals of the Charter of the United Nations. Where the Charter declares its purpose as the pursuit of international peace and security, the work of the OPCW presents a concrete manifestation of this aspiration. The Convention has succeeded when disarmament in general has remained stagnant. Implementing the global prohibition on chemical weapons is a triumph of multilateralism. It has decisively advanced the cause of peace. We look forward keenly to the Secretary-General’s address to the Conference.

Review Conferences are meant to take stock and to set the long-term view. This Conference takes place at a particularly important juncture. The success of the OPCW is evident in the 16 years of the operation of the Convention and the apparatus of its implementation. Today, 188 States are party to the Convention, and nearly 80% of all declared chemical weapons have been successfully destroyed. Progress continues to be made on the destruction of the remaining stockpiles. The aim is to complete this process in the shortest time possible.

A unique system of international verification to ensure non-diversion of chemicals for prohibited purposes is a hallmark of the OPCW. Close to 2,400 inspections since inception testify to the success of industry verification.

The objectives of the Convention are advanced within a

framework of multilateral cooperation for mutual benefit. It has thus become a vehicle for offering assistance and protection against chemical weapons as well as for promoting peaceful uses of chemistry. Overall, the regime stands as a solid vanguard against chemical weapons.

The long quest to ban chemical weapons, interjected by tragic and repeated episodes of their use, has been vindicated. The Convention’s blueprint of 1993 has been transformed into an edifice that stands tall in 2013. Prohibiting an entire category of weapons of mass destruction with a system of verification is an historic development.

But old threats have not disappeared. A stark reminder is the recent situation in the Syrian Arab Republic, where the Secretary-General has decided to conduct an investigation of the alleged use of chemical weapons. In accordance with standing agreements, the resources of the OPCW have been placed at his disposal. States Parties to the Chemical Weapons Convention have supported this investigation. Chemical weapons in the context of Syria is a matter of serious concern. Any use of chemical weapons is reprehensible and unacceptable.

The case also illustrates how important it is to secure the universal acceptance of the Convention. The Secretary-General and I have jointly addressed letters to the leaders of the eight States not Party, inviting them to join the Convention without delay.

The Review Conference must issue a clarion call that chemical weapons stand totally condemned and that there is no justification, however argued, for not joining the Convention.

Through the work of the OPCW, the world is a much safer place. Elimination of all declared chemical weapons—a core objective—is in sight. We must now resolve to make the Convention a permanent barrier against chemical weapons in all parts of the world. Reaffirming this commitment is the key to the future success of the Convention. This Organisation does not have a sunset. This is not the time to lower our guard.

The future calls upon us to persevere with eliminating the remaining chemical weapons; to strengthen verification; to use our institutional experience and expertise, acquired

over many years, in helping States Parties implement their obligations more fully; and to assist them in building their capacities to deal with new threats, including terrorism. We must also remain aware of the implications of new developments in scientific research. The imperative to perpetuate the global norm against chemical weapons requires actions that will ensure the Convention's abiding relevance.

Today, in the face of changing circumstances, we must bring to bear our collective commitment and place the Convention on an enduring footing.

We are on the verge of reaching "global zero" on chemical weapons. The Third Review Conference is an occasion to establish a strategic direction that will preserve the effectiveness of the instrument that has brought about this remarkable achievement.

An Open-Ended Working Group has worked diligently to prepare for this Conference. I commend Ambassador Nassima Baghli of Algeria for her able stewardship of that process. The report of the Working Group provides an excellent basis for the Review Conference to conduct its work and finalise its recommendations.

To facilitate the Working Group's deliberations, the Secretariat provided details of its work over the last five years, both in presentations and as a document. The Secretariat's working paper, in its updated version, has been submitted to the Conference for its consideration. It also contains my overview of what has been achieved in the implementation of the Convention and what I see as our future challenges.

The OPCW will experience a significant reduction in its workload to verify the destruction of the now dwindling stockpiles of chemical weapons. Thus, a major theme for the Review Conference will be how best the core objectives of the Convention can continue to be effectively served.

A sudden reduction of resources for any institution can rapidly erode its capacities, its expertise, its institutional memory, and indeed its ability to carry on the remaining tasks. The capabilities that the OPCW has developed over the years in delivering a variety of programmes are rare and cannot be easily found elsewhere.

As a treaty with verification and related transparency and confidence building measures at its heart, programmatic elements for preventing the re-emergence of chemical weapons will acquire much greater salience in the future. States Parties need to consider continuing improvements in industry verification, transfer controls, and data monitoring, both nationally and by the Organisation.

The Convention primarily serves a security purpose and the OPCW will remain a security organisation. A key factor in the success of our multilateral endeavours, however, is the support from our larger membership, which constitutes developing countries or countries in transition. Barring a few, they have not been possessors of chemical weapons, nor do they have extensive industry. They understandably attach great importance to the provisions of the Convention on economic and technological development.



“ The Review Conference must issue a clarion call that chemical weapons stand totally condemned and that there is no justification, however argued, for not joining the Convention. ”

Our programmes in the area of international cooperation have been crucial in generating support for the overall goals of the Convention and in attracting such wide membership. Continued attention to and improvements in our international cooperation activities will serve the aims of the Convention.

Implementation of the Convention's allied provisions on assistance and protection against chemical weapons is an excellent example of how we can make adjustments to accommodate evolving conditions, perceptions, and demands. Over the

years, the approach of States Parties seems to have shifted from the classical concern about the use of chemical weapons in a battlefield situation to lower intensity incidents, mostly in the form of threats from non-State actors. This includes concerns about the possible misuse of industrial toxic chemicals. There is a clear expectation from the OPCW in the context of helping States Parties develop the capacities of national response teams and systems.

Future work in this and related areas will include establishing more effective coordination with the United Nations and other international agencies that have mandates covering prevention and consequence mitigation in the event of terrorist use of chemical or biological weapons. Developing mutually beneficial relationships and coordination at the regional and subregional levels will also be a priority.

Additionally, the threat from non-State actors and the threat of terrorism in particular have created an expectation for the Organisation to play a part in promoting chemical safety and security against the hostile use of toxic chemicals or preventing chemical accidents.

The demand for the OPCW's role in this area comes from States Parties themselves. It shows that, at a time of rapid change, we can indeed adapt in order to continue to fulfil our role effectively.

Ethical norms rooted in the Convention need to be widely disseminated: to the general public and, especially, among scientists, engineers, and academics. Outreach, education, and public diplomacy should feature more prominently on the Organisation's agenda, in addition to a renewed emphasis on monitoring scientific and technological developments. Their possible implications for the verification mechanisms of the Convention must be closely followed.

Starting this year and concluding in 2015, which marks the centennial of the first massive use of chemical weapons during World War I, the OPCW will organise jointly with States Parties a series of activities and events to promote education and awareness about the Convention. While considering our responses to the changing environment and new challenges, we must continue to pay full attention to unfinished business.

National implementation of the Convention needs to improve globally. Any international treaty is only as good as its domestic implementation. National Authorities will continue to play a crucial role in this respect. The OPCW has acquired valuable experience assisting States Parties in fulfilling their treaty obligations. We regularly support the United Nations in its own endeavours, such as those meant to promote the implementation of United Nations Security Council resolution 1540 (2004).

In the times ahead, the OPCW will pay much greater attention to tailor-made approaches to help individual countries implement their obligations under the Convention. We will continue to institute new methods and approaches to improve the overall record of national implementation as a significant number of States Parties still need to take action.

The Organisation was described by the Advisory Panel on Future Priorities of the OPCW as the "global repository of knowledge and expertise with regard to chemical weapons disarmament, the verification of their non-possession and non-use, and a repository of knowledge about their

destruction". It recommended that "the OPCW should find ways of ensuring continuity in its knowledge base and expertise in these areas".

With disarmament nearing completion and the consequent structural changes that are inevitable, such knowledge is in danger of dissipating. I propose the setting up of a training and research centre at the Secretariat. Such a centre will act as a focal point for consolidating OPCW training programmes both for staff and States Parties and will offer modular training, devised in accordance with modern methods and means of dissemination, to cover a variety of subjects. It will constitute a resource available to all States Parties. It will also provide support to regional centres of training that States Parties are encouraged to establish.

We need common understanding of longer term priorities, adequate resource allocations, and an appropriate structure of the Secretariat. This will sharpen the vision of the future of the Convention and the OPCW as a permanent bulwark against chemical weapons. The Third Review Conference provides us with an invaluable opportunity to outline such a framework.

Our work would be incomplete without the participation of experts, academics, scientists, and other members of civil society. I wish in particular to acknowledge the vital role of the chemical industry. Industry's contribution makes the Chemical Weapons Convention a unique example of public and private partnership in the service of peace. I am glad to note the high level of participation of representatives of civil society in this Review Conference.

The prohibition against chemical weapons shows how the international community can advance the cause of disarmament and international peace. The spirit of cooperation and consensus amongst States Parties makes the OPCW exemplary in the field of multilateral diplomacy. A manifestation of the constructive approach of States Parties is the significant voluntary contributions made by them and by regional organisations.

This is a defining moment in the history of the chemical weapons ban. I am confident that the characteristic dedication and commitment of our States Parties will once again be fully evident during this Conference, leading to an outcome that will be consistent with the hopes and expectations of the international community.

I wish the Review Conference every success.

Thank you for your attention.

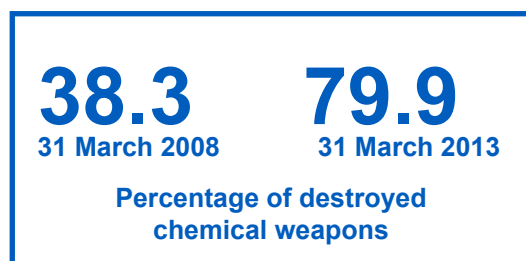
OPCW in Review: The Past Five Years

The experience of the implementation of the Chemical Weapons Convention illustrates the success of multilateral disarmament regimes. In the past five years the international community has witnessed further progress toward the realisation of the goals of the Convention. Major achievements related to the core objectives of the Organisation for the Prohibition of Chemical Weapons (OPCW) include the following:

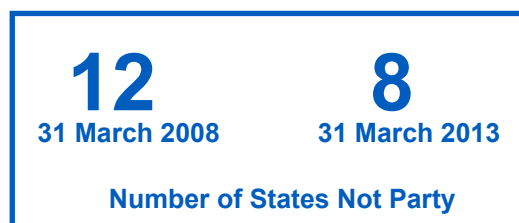
Universal Adherence to the Convention

The number of States that remain outside the Convention decreased to eight. With the Bahamas, the Dominican Republic, Guinea Bissau, Iraq, and Lebanon having joined the Convention since the Second Review Conference in April 2008, 188 States Parties are now committed to a world free of chemical weapons and the whole continents of Europe and America enjoy full regional adherence. This accomplishment is due to the concerted efforts of States Parties, the Director-General and the Technical Secretariat. The following eight States still remain outside the Convention: Angola, the Democratic People's Republic of Korea, Egypt, Israel, Myanmar, Somalia*, South Sudan, and the Syrian Arab Republic.

Destruction of Chemical Weapons:



More than 40% of declared Category 1 chemical weapons have been destroyed during the last five years. As at 31 March 2013, the total amount of destroyed chemical weapons is 55,474 MTs (79.9%). In addition to Albania, which completed the destruction of all its declared chemical weapons in July 2007, A State Party and India completed the destruction of all their chemical weapons in July 2008 and March 2009, respectively. Libya has destroyed 51.1%, the Russian Federation has destroyed 72.2%, and the United States of America 89.8% of their respective declared quantities. In December 2012 the Conference of the States Parties at its Sixteenth Session adopted the decision on the final extended deadline of 29 April 2012 that provided for a number of transparency and confidence-building measures.



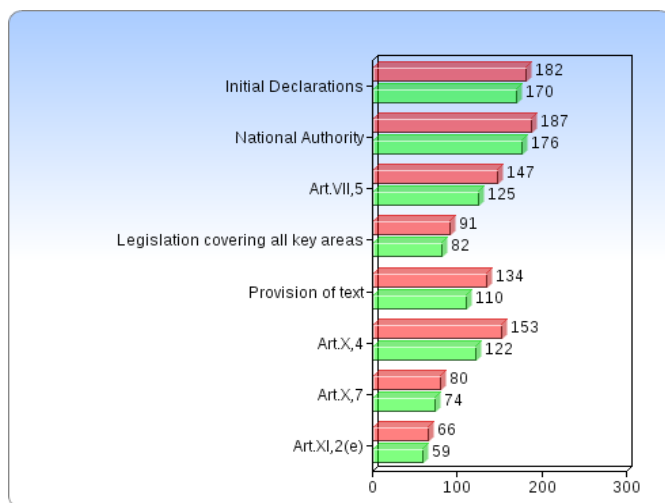
These measures have been fully implemented by three possessor States Parties concerned—Libya, the Russian Federation and the United States of America—and by the Technical Secretariat as well as monitored by the Executive Council, the Conference of the States Parties and the Review Conference.

Prevention of Re-emergence of Chemical Weapons

The OPCW has conducted 1045 industry inspections in 80 States Parties since the Second Review Conference until 31 March 2013: 55 inspections of Schedule 1 facilities; 211 inspections of Schedule 2 facilities; 142 inspections of Schedule 3 facilities; 637 inspections of other chemical production facilities (OCPFs). In October 2011, the Executive Council at its Sixty-Sixth Session adopted a decision on policy guidelines for industry verification and decided that these guidelines should be taken into account in a balanced manner, recognising that the number of Article VI inspections would continue to be determined pursuant to both the requirements of and the limits set by the Convention.

Progress in the Implementation of Obligations under the Convention

There has been tangible progress in respect to the implementation of obligations under the Convention. As at 31 March 2013, 182 States Parties had submitted their initial declarations under Article III and/or Article VI; 187 States Parties had established or designated their National Authorities; 147 States Parties had made their submissions under paragraph 5 of Article VII; 91 had notified the Secretariat of the adoption of legislation that is considered to cover all key areas; 134 States Parties had provided the text of adopted measures; 153 States Parties had submitted information on their national programmes for protective purposes at least once, in accordance with paragraph 4 of Article X; 80 States Parties had made offers of assistance to the OPCW pursuant to paragraph 7 of Article X; and 66 States Parties had confirmed the review of existing national regulations regarding the trade in chemicals under subparagraph 2(e) of Article XI.



Progress in key areas. This data is a snapshot of 31 March, 2013 (red) and 31 March, 2008 (green).

Building National Capacity

The objectives of Articles relevant to national capacity building have received continuous support. States Parties have benefited from a variety of programmes conducted by the Secretariat in close cooperation with States Parties in a position to provide assistance in accordance with the relevant decisions of the policy-making organs.

National Implementation of the Convention: Following the recommendations of the Second Review Conference and the relevant decisions of the Conference, the Secretariat continued to develop and carry out its implementation-support programmes with a view to improving the status of national implementation under Article VII. An annual progress report has been submitted by the Secretariat to the Policy-Making Organs for their consideration.

Protection against Chemical Weapons: The Secretariat has continued to assist States Parties in the development and improvement of their protective capacities against chemical weapons, as well as in maintaining a state of readiness to respond to a request for assistance in the case of the use or threat of use of chemical weapons, in accordance with Article X. These activities have been reported through the Director-General's opening statements at sessions of the Council and the Conference and are detailed in a regular report.

International Cooperation for Peaceful Use of Chemistry: In a collaborative and mutually reinforcing manner, the Secretariat and supporting States Parties have continued to provide States Parties with a variety of international-cooperation programmes including the recently launched chemical safety and security management programme with the aim to build national capacity to promote peaceful chemical activities. A decision adopted by the Conference at its Sixteenth Session in 2011 marks a key point in the ongoing implementation of Article XI and provides an agreed framework for future activities in promoting the peaceful use of chemistry.

Effective Functioning of the Organisation

The OPCW is making efforts to fulfil the goals of the Convention and achieve results with fewer resources through more efficient and effective management.

The size of the OPCW remained the same from 2008 to 2011 with a budget of EUR 74.5 to 75.0 million and 523 authorised fixed-term posts. However it became smaller in 2012 and 2013 mainly because of fewer activities related to the destruction of chemical weapons. The regular budget for the OPCW decreased to EUR 70.6 million in 2012 and to EUR 69.8 million in 2013, while the level of authorised fixed-term staff significantly went down to 482 posts in 2012 and slightly rose to 491 posts in 2013. In 2011 the Secretariat introduced the principles of result-based management (RBM) in its management processes and practices in order to better ensure that the work of the Secretariat contributes to the achievement of clearly defined results and of the core objectives of the Organisation.

“Working Together for a World Free of Chemical Weapons”

In July 2011, the OPCW's adoption of the motto *“Working Together for a World Free of Chemical Weapons”* was endorsed by the Council at its Sixty-Fifth Session. In the meantime the Secretariat has reinvigorated its public diplomacy efforts aimed at improving the international profile of the OPCW. A large variety of events and activities reaching out to relevant stakeholders such as the chemical industry, academia and civil society have been conducted. There is a significant increase in the number of media citations of the OPCW and the Convention in the period following these events and activities. This has also significantly increased the number of visitors to the OPCW's public website and social media sites.

* Somalia acceded to the Convention on 28 June 2013.

Perspectives from the Chairs

Ambassador Nassima Baghli of Algeria

Chairperson of the Open-Ended Working Group for Preparations for the Third Review Conference



Ambassador Nassima Baghli of Algeria served as Chairperson of the Open-Ended Working Group for Preparations for the Third Review Conference (OEWG). The OEWG held 33 meetings between May 2012 and March 2013 and also met informally with representatives of the chemical industry and civil society. On 28 March 2013, the OEWG submitted a Draft Provisional Text to the Third Review Conference.

Ambassador Baghli noted that all throughout the preparatory process, States Parties demonstrated their faith in multilateralism, specifically that the CWC is the sole multilateral treaty banning a whole category of weapons of mass destruction. States Parties are strongly committed to the CWC and expressed their strong desire to seize the opportunity of the Third Review Conference to move further in the implementation of the Convention.

Ambassador Krzysztof Paturej of Poland

Chairperson of the Third Review Conference



Ambassador Krzysztof Paturej served as Chairman of the Third Review Conference. In his final remarks he noted that Conference offered a thorough, balanced and inclusive review of the functioning of the Organisation and the implementation of the Convention and produced a landmark Final Document. He highlighted the very positive, open and often very friendly atmosphere in which the conference was conducted. Ambassador Paturej also drew attention to the fact that the Third CWC Review Conference was the first to provide a platform of cooperation among three players: the Member States, the Technical Secretariat and the stakeholders, composed of industry, NGOs, academia and independent experts.

In his view such cooperation strengthened the open and inclusive character of the OPCW, complemented deliberations and offered valuable views, provided a long-term perspective, and offered additional capacity building. The Conference Chairman also characterised as extremely positive the recognition of the importance of the dialog and need for debate in front of forthcoming changes and challenges, in close cooperation with and the participation of all relevant stakeholders.

Ambassador Sa'ad Abdul Majeed Ibrahim Al-Ali of Iraq

Chairperson of the Committee of the Whole



The Conference elected Ambassador Sa'ad Abdul Majeed Ibrahim Al-Ali of Iraq as Chairperson of the Committee of the Whole (CoW). The CoW held eight meetings and informal consultations from 15 to 19 April 2013, during which it worked on the basis of the Draft Provisional Text that had been submitted by the Open-Ended Working Group for the Preparation of the Third Review Conference.

On 19 April the CoW submitted the results of its work, as contained in its report to the Review Conference. On that occasion Ambassador Al-Ali noted that the work of the CoW had reconfirm the well deserved reputation of the OPCW as a model multilateral organisation. He emphasised that the Committee had produced a solid, meaningful and forward-looking document, by reaching deep into reservoirs of patience, stamina and goodwill of all delegations who had contributed to the work of the CoW. Ambassador Al-Ali thanked each and every delegation for the sterling work that they had done including those delegations who sacrificed their longstanding national positions to reach consensus.

Highlights from the general debate at the Third Review Conference

by Richard Guthrie, CBW Events



The Third Review Conference, and in particular the general debate, provided an opportunity for States Parties to lay out their views of the Convention and its implementation. There are few chances for such on-the-record debate. The views expressed here are from the perspective of an observer looking in to the process.

The core function of the Review Conference is to review both the past and to consider implications for the future. The process and procedures of both the Review Conference and the work of the Open-Ended Working Group (OEWG) and other preparatory activities beforehand provided opportunities for a thorough examination of the Chemical Weapons Convention and its implementation. All discussions were open to all delegations on all of the key areas of work. This was a distinct improvement on 2008 in which much of the language of the final document was decided by a small group of delegates in a side room.

There were many issues under discussion at the Review Conference. There is only space here to examine a few of them.

Syria situation

Syria was always going to be the issue with the greatest potential to impact upon the Review Conference. Within any international arrangement, there is always a question

of how the members of a treaty deal with governments that are not members.

The negotiators of the Convention had aspirations for it to be a global convention, highlighting this in the preamble text: 'for the sake of all mankind, to exclude completely the possibility of the use of chemical weapons'. This part of the preamble was quoted by Ireland (on behalf of the European Union) and the United States in general debate statements. It was also quoted within the paper by Armenia, Belarus, Iran, Russia and South Africa on the 1925 Geneva Protocol (RC-3/NAT.7). A number of calls were made for Syria to join the Convention and therefore destroy any chemical weapons it holds under international verification. It was noted that Syria, while not a party to the Convention, is a party to the Geneva Protocol which prohibits the use of poison gas in war.

A number of statements urged the Conference to reach a significant or serious response to the situation in Syria. Many delegations stated that use of chemical weapons is 'reprehensible' and 'in violation of international law'. There was a broad geographic spread of expressions of concern about the situation in Syria, such as: 'alarmed' (Australia), 'seriously concerned' (Belgium), 'critical situation' (Bolivia), 'gravely concerned' (European Union), 'very alarming' (Germany), 'much concern' (India), 'serious concern' (Japan), 'grave concern' (Saudi

Arabia), ‘very concerned’ (Thailand), and ‘grave situation’ (United States).

On the subject of the investigation by the United Nations Secretary-General, most delegations that referred to the issue suggested all serious claims should be examined without delay. The statement on behalf of the NAM CWC States Parties and China expressed “deep concern that chemical weapons may have been used in the Syrian Arab Republic.

“We underline that the use of chemical weapons by anyone under any circumstances would be reprehensible and completely contrary to the legal norms and standards of the international community.

“We also express our unequivocal support of the investigation that has been initiated by the Secretary-General of the United Nations with the support of the OPCW.”



Dutch Foreign Minister Frans Timmermans addresses the plenary at the Third Review Conference.

Iran in its national statement was more specific:

“We also welcome the request of Syrian Government to the United Nations Secretary-General for carrying out an impartial investigation of this incident and support the dispatching of an investigation team with the assistance of the OPCW to that country based on the Syrian Government request, to identify and punish perpetrators and those who provided chemical weapons to them.”

Russia was also specific about only supporting the investigation requested by the government of Syria: “Under these circumstances we believe that it is necessary to launch the United Nations mission without delay to investigate the alleged use of chemical weapons about which the Syrian government notified the United Nations Secretariat.”

Article XI

The Convention contains a bargain, embodied in Article XI, which is the renunciation by States Parties of hostile uses of chemical materials and technologies in return for freedom to gain the benefits of the peaceful uses of them. Security, economic and geographical considerations influence how individual governments see the balance between the two sides of this bargain.

Most Western States have consistently put emphasis on the security aspects of the bargain, while States seeking greater economic development see access to peaceful uses as a key justification for using precious governmental resources in their engagement with the Convention.

Moreover, some States promoting Article XI issues expressed the view that the article should not simply be seen as a safeguard to ensure that measures to restrict potential hostile uses of relevant materials do not impinge upon peaceful activities but should be seen as a positive effort to promote peaceful cooperation.

The proposal for a plan of action on Article XI, as contained in the non-aligned paper (RC-3/NAT.13), was heavily promoted by the non-aligned States Parties and by Iran in particular, with that country also producing a national paper on implementation of the article (RC-3/NAT.12). There was widespread reference to the decision taken by the Conference of the States Parties (C-16/DEC.10) on ‘Components of an

Agreed Framework for the Full Implementation of Article XI’.

Article XI was also discussed in a broader context. For example, Poland suggested international cooperation to enhance chemical safety and security would broaden the scope and accommodate the implementation of Article X and Article XI. The United States also connected chemical safety and security issues, and aspects of developing best practices as a contribution to capacity building in particular, with Article XI.

Incapacitants

There has long been differing interpretations as to how incapacitants—substances that impact upon consciousness or decision-making abilities—should be dealt with under the Convention. A major part of this is the interpretation of the term ‘law enforcement’.

The delegation of Switzerland, supported by a number of other countries, had wanted to move the debate on this subject area further. Acknowledging that this issue would be difficult to reach conclusions on, they noted that ‘the risks of inaction are far greater than the benefits of keeping the current uncertainty’. Support for a debate was expressed by Ireland, Norway, Romania and Slovakia, amongst others.

OPCW Today

One effect of this effort was that some governments took the opportunity to clarify their positions. For example, Germany and the United Kingdom both indicated they would not use incapacitating chemical weapons more toxic than would fit the definition of RCAs for law enforcement. This may prompt others to review their policies. Germany produced a paper 'Toxic Chemicals for Law Enforcement' (RC-3/NAT.44).

The United States raised the issue of incapacitants from another angle, noting that concerns had been raised that a programme for such agents for use in law enforcement could be used to conceal a programme to acquire these for other purposes and stated that the general purpose criterion [without naming it] would still apply. The 'general purpose criterion' is the principle embodied within the Convention that all toxic chemicals (and other artefacts associated with hostile uses of chemicals) are

prohibited unless they are held for a permitted purpose, and in types and quantities consistent with that purpose.

Participation by civil society and industry

For the first time at a Review Conference, non-governmental representatives were given the opportunity to address a plenary session. The session was opened by the Chair of the Conference, Ambassador Krzysztof Paturej (Poland), who described the decision for greater NGO participation as a 'landmark'. OPCW Director-General Ahmet Üzümcü welcomed the 'pioneer effort' as a step forward in NGO engagement and said he looked forward to 'valuable and constructive inputs'. Representatives from groups based in Brazil, Iran, Kyrgyzstan, Poland, South Africa, Turkey, the United Kingdom of Great Britain and Northern Ireland, and the United States contributed to this session.

Connect with OPCW Social Media



www.facebook.com/opcwonline



www.twitter.com/opcw



www.youtube.com/opcwonline



www.flickr.com/opcw



www.gplus.to/opcw

New and emerging issues at the Third Review Conference



The Third Review Conference marked the culmination of a process that started with the Sixty Eighth Session of the Executive Council in May 2012 setting up an Open Ended Working Group (OEWG) for the preparation of the Third Review Conference. The OEWG held 33 meetings between May 2012 and March 2013 and submitted its Draft Provisional Text (RC-3/CRP.1, dated 28 March 2013) to the Review Conference.

In parallel to the OEWG work, several stakeholders organised events and issued reports in support of the preparation of the Review Conference. These included inter alia a Royal Society seminar at OPCW headquarters on 18 February that addressed the implications for the Convention of convergent trends in science and technology¹, and a UNIDIR meeting at OPCW headquarters on 19 February, based on contributions to a thematic issue of UNIDIR's journal *Disarmament Forum*.²

The Third Review Conference itself saw increased participation of a number of stakeholders as well as two procedural innovations: First, for the first time non governmental organisations (NGOs) were able to address the RC-3 plenary after the conclusion of the general debate. Second, the CWC Coalition, a grouping of interested NGOs, organised three thematic side events. Short summaries are presented starting on page 29.

New and emerging issues arising from the various contributions made by States Parties and stakeholders can best be categorised as follows according to the OPCW's core objectives and a few additional cross-cutting themes. The following discussion of new and emerging issues will therefore be organised accordingly.

Core objective 1: Elimination of chemical weapons stockpiles and chemical weapons production facilities

With almost 80% of declared chemical weapons stockpiles have been destroyed, practically all comments referenced the continued importance of this central goal. While the assessment of the current situation varied somewhat, the decision contained in C-16/DEC.11 on the final extended chemical weapons destruction deadline received widespread support as a good basis for achieving the complete elimination of declared chemical weapons stockpiles.

Among other new developments was an initiative by four States Parties on sea-dumped chemical weapons, which seeks to establish the OPCW as a venue for voluntary cooperation in this area. This has resulted in inclusion of corresponding language in the final document of the Third Review Conference.

Core objective 2: Non-proliferation / preventing re-emergence of chemical weapons

Measures identified for furthering the goal of non-proliferation and preventing the re-emergence of chemical weapons were either of a generic nature, such as capacity building for protection and for chemical safety and security, and education and outreach to the scientific and technological (S&T) community, or they focussed on more practical issues. These included enhancing the accuracy of declarations, improving the process for selecting sites for inspection through using public sources and additional information provided voluntarily by States Parties, or the extension of sampling and analysis to all types of industrial

inspections. In addition, it was proposed to expand the verification regime through industry monitoring, appropriate controls on transfers of chemicals, and regulatory measures to identify and track toxic chemicals.

Also related to core objective 2 is the discussion on so-called incapacitating chemical agents (ICAs), which received much more attention at the Third Review Conference than during previous Review Conferences.³

Core objective 3: Assistance and protection against chemical weapons under Article X

While most of the statements on assistance and protection focussed on the provision of assistance, several also raised the issue of the need for States Parties to be able to receive such assistance and the capacity building required in this regard. Some reference was made to national or regional centres and initiatives in this area and an increasing number of contributions referenced the changing threat environment, including non-State actors.

Core objective 4: Economic and technological development through international cooperation

Economic and technological development through international cooperation received widespread attention and was addressed in the majority of general debate statements. Interpretations varied as to how best to implement Article XI, with some arguing that the agreed framework as contained in C-16/DEC.10 needs to be implemented before further steps should be pursued, and others proposing a plan of action for the full implementation of Article XI as a fundamental pillar of the Convention.

Core objective 5: Universal adherence to the Convention

The large majority of statements during the general debate made reference to universality and its continued importance. Many welcomed the accession of five new States Parties since the Second Review Conference and pledged support to bring the remaining eight States not Party into the regime. Some statements referred to the previously agreed action plan on universality, others made practical offers of implementation assistance. In addition, the idea to consider new mechanisms such as special envoys was put forward. As statements on the initiative for a WMD free zone in the Middle East show, some States Parties were hoping the conference scheduled in this context might have a positive spill-over effect on Convention universality.

Core objective 6: Implementation by States Parties of the provisions of Article VII

National implementation featured in the majority of statements. A wide spectrum of interpretations was presented, ranging from concern being expressed that

only half of all States Parties have comprehensive legislation in place to the view that considerable progress has been made since the adoption of the Article VII action plan in 2003. Several statements were made in support of the 'tailor-made' assistance approach to Article VII implementation, taking into account local realities. Some linked national implementation to core objective 2 above, while others pointed out that national implementation needs to go beyond mere legislative acts to include education and outreach measures.

Core objective 7: Full, effective, and non-discriminatory implementation of all provisions of the Convention by the OPCW

Statements on the implementation of Convention provisions regarding investigations of alleged use (IAU) were dominated by references to the United Nations Secretary General's investigation of the alleged use of chemical weapons in Syria, a State not Party to the Convention.⁴ In addition, some States Parties raised more technical issues in relation to the conduct of challenge inspections and IAUs and emphasised the importance of the OPCW Central Analytical Database and the inclusion of data on riot control agents, old and abandoned chemical weapons, and degradation products of scheduled chemicals.

Cross-cutting theme 1: Chemical industry

In addition to industry's relevance for education and outreach activities, the chemical industry attracted attention in a number of statements in relation to OPCW verification activities, such as the OCPF site-selection methodology and verification at mixed plant sites. In addition, some States Parties identified the need to be better able to identify companies with declarable activities through information exchanges by National Authorities or through outreach activities to declarable plant sites. Already in the run-up to the Third Review Conference the International Council of Chemical Industries (ICCA) issued a position paper in which they made a number of proposals, both on substance and on interaction with the OPCW.⁵

Cross-cutting theme 2: Scientific and technological developments

The new issues in relation to S&T developments during the general debate were of both a quantitative and qualitative nature. The Third Review Conference saw more references to S&T developments than previous Review Conferences, many of which were more detailed. For example 17 States Parties that mentioned S&T made specific reference to the Scientific Advisory Board (SAB), 16 to Article XI issues, nine each to convergence and education and outreach, and seven statements mentioned S&T in the context of verification.

Cross-cutting theme 3: Chemical safety and chemical security

References to chemical safety and chemical security can be identified in relation to chemical safety and chemical security measures contributing to the goal of preventing the re-emergence of chemical weapons. While several States Parties emphasised the need for the OPCW to collaborate with other actors and avoid duplication of efforts, others placed greater emphasis on the link between chemical safety and chemical security and international cooperation and assistance measures. The sharing of best practices, especially in chemical industry, was identified as a particularly useful tool by some. It was suggested that the OPCW could serve as a platform for cooperation.

Cross-cutting theme 4: Education and outreach

Education and Outreach featured in over a quarter of all statements during the general debate, spanning all five regional groups. Strategic partners that were identified most often in this context include the chemical industry, academia, and civil society organisations more broadly. Some statements made reference to the role of Education and Outreach in Article VII implementation and to the SAB Temporary Working Group on Education and Outreach as a useful link in better connecting the OPCW with the Science and Technology community.

Cross-cutting theme 5: OPCW as a knowledge repository, including a training and research centre

The notion of the OPCW as a knowledge repository resonated with some States Parties. They made reference

to the maintenance of chemical weapons-related as well as industry verification expertise as an important tool for preventing the re-emergence of chemical weapons, and as a means to address situations involving toxic chemicals in possible breach of the Convention in the post-destruction era. The idea of establishing a training and research centre at the OPCW was also reflected upon, although mostly in references to national and regional training centres.

Cross-cutting theme 6: The OPCW's role in the fight against terrorism

International terrorism, including the possibility of the use of chemical weapons by non-State actors, was identified as being of increasing concern by a number of States Parties. Some acknowledged the positive contribution made by the OEWG on terrorism. Maintaining an effective verification regime as well as Article VII, X, and XI implementation were identified as important in the fight against terrorism. In addition, the relevance of UNSC Resolution 1540 was mentioned, as were collaborative efforts with other international institutions more broadly.

Following-up on new and emerging issues

In sum, the Third Review Conference, including the process leading up to it, revealed a substantial menu of new and emerging issues, many of which were included in the final document of the Conference and will be translated into concrete follow-up actions to be taken either by States Parties, the OPCW policy-making organs or its Technical Secretariat in order to achieve the full and effective implementation of the Chemical Weapons Convention.

Endnotes

1. Cf. http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/projects/brain-waves/2012-02-06-BW3.pdf
2. Cf. <http://www.unidir.org/files/publications/pdfs/agent-of-change-the-cw-regime-en-312.pdf>
3. Cf the contribution by Richard Guthrie on this issue.
4. Cf the contribution by Richard Guthrie on this issue.
5. Cf. <http://www.icca-chem.org/ICCADocs/ICCA%20%20position%20paper%203rd%20review%20Conference%20OPCW.pdf>

The Third Review Conference discusses the International Cooperation and Assistance Programme of the OPCW

International Cooperation and Assistance (ICA) activities, since the very inception of the OPCW, have been on the agenda of the Policy Making Organs and continue to draw considerable attention from States Parties. In view of the valuable and synergistic role played by ICA activities in ensuring the success of the Convention, successive review conferences have underlined their importance and made significant recommendations to further reinforce ICA programmes. The Open Ending Working Group for the preparation of the Third Review Conference, as well as the Review Conference itself, witnessed a rich and lively debate among States Parties on the issues related to International Cooperation and Assistance.

States Parties not only conducted a detailed review of the ICA programmes and their impact, but also provided guidance for future activities. Discussions were informed by a note prepared by the Technical Secretariat to serve as input for States Parties to review the Convention (RC-3/S/1, dated 12 March 2013) which provided a detailed overview and assessment of ICA activities including future trends and projections. The three branches of the ICA Division also made presentations to the Review Conference and the OEWG, as part of the programme of work. This helped States Parties gain a comprehensive understanding of the vast range of ICA programmes undertaken by the Technical Secretariat and States Parties. The Technical Secretariat, in turn, received valuable feedback from States Parties as well as directions for the future.

States Parties expressed their commitment to adopt, in accordance with their constitutional processes, the necessary measures to fully implement their obligations under the Convention as a matter of priority, noting that 97 States Parties still need to adopt such measures and to keep the effectiveness of these measures under review. There was also an acknowledgment by the Conference of the role of education, outreach and awareness-raising as a relevant activity for the national implementation of the Convention, including awareness among academia and relevant scientific communities of the provisions of the Convention, and the domestic laws and regulations relevant to the Convention.

The Third Review Conference welcomed the activities of the OPCW in relation to assistance and protection against chemical weapons and supported further efforts both by States Parties and the Secretariat to promote a high level of readiness to respond to chemical weapons

threats. The Conference welcomed the increased focus on making full use of regional and sub-regional capacities and expertise, including taking advantage of established training centres. States Parties also expressed their determination to increase their efforts to guard against the possible hostile use of toxic chemicals by non-State actors such as terrorists. It also took note of the establishment of the International Support Network for Victims of Chemical Weapons and the establishment of a voluntary fund to support the Network as a welcome step.

The Conference underlined its commitment to foster, and to further develop and enhance actions for, international cooperation amongst States Parties in the peaceful uses of chemistry, and also to implement the provisions of the Convention in a manner which avoids hampering economic and technological development for purposes not prohibited under the Convention.

The Third Review Conference noted the initiatives taken by States Parties and the Secretariat to promote activities in the areas of chemical safety and security, and welcomed the role of the OPCW as a platform for voluntary consultations and cooperation among States Parties and relevant stakeholders, including the private sector and academia, to promote a global chemical safety and security culture.

Taking into account the important role that e-learning can play, the Review Conference encouraged the Secretariat to expand the use of e-learning as one of the means for capacity building and outreach activities. The Review Conference also took into cognizance the importance of South-South, regional, and sub-regional cooperation in the context of capacity building and encouraged the Technical Secretariat and States Parties to enhance such activities.

Broadly speaking, the Third Review Conference reiterated the central role of the ICA Programme in the context of full and effective implementation of the Convention. ICA activities provide an important mechanism to engage with States Parties for whom chemical weapons have never been a reality, and who continue to benefit from support by the OPCW and other States Parties in the area of peaceful uses of chemistry and enhanced capacity to implement the Convention. The Technical Secretariat will continue to work with States Parties to further strengthen the programme based on tailor-made and customised approaches.





Video Interviews from the Third Review Conference

Watch these interviews and more at <http://www.opcw.org/rc3/video-gallery/>

Angela Kane, United Nations High Representative for Disarmament Affairs



“With 80 per cent of chemical weapon stocks gone, the OPCW needs to think about the future. Investigations of alleged use and working with chemical industry will be critical in this regard.”

Mehdi Akhondzadeh Basti, Deputy Minister of Foreign Affairs for the Islamic Republic of Iran



“The timely destruction of chemical weapons will send an encouraging sign to countries who have not yet joined this Convention.”

Rolf Wilhelm Nickel, Federal Government Commissioner for Disarmament and Arms Control, German Federal Foreign Office.



“Syria is a very large concern and the OPCW can play an important role in that respect. We also need to advance on the issue of incapacitating chemical agents.”

Rose Gottemoeller, Acting Under Secretary for Arms Control and International Security at the US Department of State



“The CWC is not only about eliminating existing chemical weapons but also looking to the future and ensuring that they never re-emerge as a threat to mankind.”

The Scientific Advisory Board during the Third Review Conference and beyond

by Stefan Mogl, Chair, Scientific Advisory Board, Head of Chemistry, Spiez Laboratory, Switzerland



The Scientific Advisory Board (SAB) provides specialised advice in relation to science and technology to the OPCW Director General. Following the practice for the previous Review Conferences, the SAB prepared a report on the developments in science and technology for the Third Review Conference, taking into account a variety of sources. In contrast to the First and the Second Review Conferences, for the Third Review Conference the SAB was invited to participate more actively, both during the preparatory phase and during the Conference itself.

Preparatory process

Aiming at issuing its report in time to assist States Parties in their preparations for the Review Conference, the SAB initiated the process to evaluate developments in science and technology two years prior to the Third Review Conference, at its Sixteenth Session, in April 2011. During the same session, the SAB began planning the International Union of Pure and Applied Chemistry workshop that would support the Board's evaluation.

The workshop organised by IUPAC and the OPCW was held in February 2012 in Spiez, Switzerland, and was an important contribution to the evaluation of developments in science and technology. The SAB's report for the Third Review Conference (RC-3/DG.1) was issued on 29 October 2012 and presented to the Open Ended Working Group (OEWG) on 1 November.

This was the second time the SAB had been invited to brief the OEWG. On 10 October the SAB Chair had presented the Board's 'methods of working' to the OEWG for its review of the functioning of the OPCW.

SAB participation during the Third Review Conference

Several current and former members of the Board participated in the Third Review Conference, some as national delegates, others as part of associations. For the first time at a Conference of the States Parties, the SAB was invited to speak to the Conference while in session: the Chair of the Review Conference invited the Chair of the SAB to introduce the Board's key findings of its report to the Third Review Conference during the plenary session.

SAB key findings presented to the Review Conference

- The **convergence of the sciences** and in particular the convergence of chemistry and biology combined, with rapid advances in the life sciences affect the implementation of the Convention. The commercial production of chemicals is increasingly employing biologically mediated processes. Other new technologies make the chemical synthesis of simple organisms and the design or redesign of biological systems possible. This may affect the production of certain classes of chemicals – including toxins and bioregulators – which create an overlap between

the CWC and the Biological Weapons Convention (BWC). The SAB therefore proposes to strengthen the cooperation between the experts on the two treaties.

- Concerns were raised in the past about the **accelerated discovery of new biologically active chemicals** as a result of new approaches and methods in drug design that could lead to the discovery of prototypes for new toxic chemicals. The Board concludes that today's large in-house databases in pharmaceutical companies pose no greater risk to the Convention than the much smaller databases that existed prior to the Convention's entry into force in 1997.
- The SAB expects that advances in **nanotechnology** will help improve countermeasures against chemical-warfare agents. The Board cannot confirm concerns about enhanced acute toxicity of nano-size materials, because too little is known today. In the view of the SAB nanotechnology is unlikely to provide a dramatic improvement in the military utility of existing chemical agents, but it could be exploited in the development of new agents and advanced delivery systems.
- The pharmaceutical industry is developing methods to **administer drugs** for medical purposes via the respiratory system through inhalation. In the form of aerosols nanoparticles deliver the drug into the lower regions of the lungs. Advancements further include engineering of nanomaterials for controlled drug release. The SAB will keep this technology under review.
- In relation to the classic **delivery of toxic chemicals** by munitions the SAB noted with some concern isolated reports of the commercial availability of munitions that apparently were designed to deliver large amounts of riot control agents over long distances.
- In relation to the **production of toxic chemicals**, microreactors have been mentioned in the past as a potentially critical development for the implementation of the Convention. In the view of the SAB, microreactors, at this point in time, are not generic reactors for an easy "off-the-shelf" solution and utilising them requires experience and technical expertise. The technology continues to require monitoring in order to assess the impact it may have on the verification regime of the Convention.
- The SAB made no specific recommendation regarding a review or an amendment of **the Schedules**, as has been proposed by some observers. It emphasised that the definition of toxic chemicals in the Convention would cover all potential candidate chemicals that might be utilised as chemical weapons.
- In relation to **Schedule 1 chemicals** the SAB alerts Member States that certain Schedule 1 chemicals may be present in industrial processes under certain conditions. Studies indicate that nitrogen and sulfur mustards are utilised as **captive intermediates** more frequently than previously thought. Based on the same studies the SAB concluded that if starting materials contain the precursor chemicals of nitrogen and sulfur mustards, both Schedule 1 chemicals may be formed as **impurities**, when chlorinating agents are present. In the view of the SAB, such mixtures pose no threat to the object and purpose of the Convention, but may have to be addressed from a policy perspective.
- Regarding chemical **incapacitants** for law enforcement purposes the Board emphasised that labelling such chemicals as "non-lethal" is inappropriate, as toxicity is a matter of dosage for all chemicals. The SAB recalled the many technical complexities for the safe use of such agents. Because incapacitants could become the subject of an investigation of alleged use, the SAB recommends that the OPCW should develop the necessary analytical capability to verify such toxic chemicals.
- The OPCW undertakes **analysis of samples on site** as part of its inspection activities. In the view of the SAB the Organisation has demonstrated in the past five years that equipment and procedures are fit for purpose and will be improved further by the Secretariat. The SAB is pleased that the contents of the OPCW central analytical database (OCAD) have grown significantly, but emphasises that strictly limiting the OCAD to scheduled chemicals may prevent inspectors from detecting other toxic chemicals with weapons potential.
- Currently 22 laboratories are designated by the OPCW for the verification analysis of chemical weapons-related samples, and may receive samples from an OPCW inspection, where **off-site analysis** is considered appropriate. Significant progress has been achieved in establishing analytical methods and identification criteria for the two Schedule 1 toxins, ricin and saxitoxin. Attention should be given also to the identification of non-scheduled or novel toxic chemicals. Should there be evidence of prohibited use of toxic chemicals, this capability will become important.
- Another area of sampling and analysis is the analysis of **biomedical samples**. The OPCW has conducted confidence-building exercises and worldwide capabilities for biomedical sample analysis have risen significantly.
- Considering the many developments regarding off-site analysis, the Board recommends a comprehensive review of the **OPCW proficiency test** system to ensure that the OPCW's off-site analysis capability remains effective.

- Because of an increasing concern that non-State actors may employ toxic chemicals, additional technical challenges have arisen in relation to **assistance and protection**, in detection and medical countermeasures as well as decontamination. Detectors have generally become smaller and more selective and sensitive in the detection of toxic chemicals but there is still room for improvements.

Developments in the field of medical countermeasures against nerve agents have been slow and a number of open issues remain. Improvements have been sought in physical protection, notably in protective suits and respirators. New formulations for decontaminants have been tested, including the use of enzymes for detoxification. However, there is limited knowledge available regarding the effectiveness of methods for the decontamination of public urban environments.

- **Education and outreach** is in the view of the SAB a critical element in preventing the re-emergence of chemical weapons and the misuse of toxic chemicals. The Board recommends that education and outreach should be strengthened in the national implementation of the Convention through concerted partnership efforts by all stakeholders, supported through National Authorities.

The way ahead for the SAB

Many States Parties expressed their strong appreciation for the work of the SAB, which has been documented in different sections of the final report. The SAB feels

encouraged and will continue to provide technical recommendations through the Director-General to the policy-making organs.

The interaction with policy-making organs could be further strengthened by inviting the SAB to explain its recommendations to the Executive Council during its sessions. The SAB stands ready to provide its technical support when and where required.

In the view of the SAB Chair, preventing the re-emergence of chemical weapons will require:

- increased efforts in education and outreach to further the understanding in the scientific community about the goals of the Convention and the dual use potential of research;
- enhanced monitoring of technological advances that may be misused for the development of new types of chemical weapons, with a focus on convergence of the sciences; and
- strengthening of the OPCW's verification capabilities, not just to identify toxic chemicals which are listed in the Schedules and used for classic chemical-warfare agents, but also to detect new types of toxic chemicals and recognise methods to produce them as well as suitable delivery systems.

Chemical weapons do not just suddenly emerge, they are the result of development programmes – it is important for the OPCW to stay vigilant!

The multiple uses of chemicals: innovation, science and security

An informal thematic discussion on science and technology during the Third Review Conference

In an important procedural innovation, the Third Review Conference incorporated an informal science and technology discussion organised by the Technical Secretariat, held on 12 April 2013 at OPCW headquarters. The event was moderated by Dr. Patricia Lewis (Director of International Security, Chatham House) and was attended by a broad representation of participants in the Third Review Conference, including members of delegations and NGOs, scientific professionals, and members of the Technical Secretariat.

Professor Pawan Dhar presented an overview of the emergence of synthetic biology in India. This is a very relevant topic to the OPCW and the Convention, as it is estimated that by the year 2020 biomediated processes will account for 10-20% of worldwide chemical production.

In the second presentation, Dr Robert Mathews was reviewing scientific developments showing promise for improved protection and countermeasures against chemical weapons and toxic chemicals.

Professor Alejandra Graciela Suarez described educational approaches in Argentina. She emphasised the key role that the CWC National Authority has for education and outreach activities in each country.

Dr Temechegn Engida addressed the issue of ensuring effectiveness in education and outreach when each country has its own context regarding how chemistry is used and how science is practised. Therefore, the most effective strategies vary regionally and States Parties might wish to consider approaches in a national context.

For the final presentation, Dr. Hugh Gregg reviewed chemical analysis in the verification of the Chemical Weapons Convention. He briefly described how chemical

sampling and on-site analysis is performed during OPCW inspections, how information not related to the mandate of the inspection is not revealed, and that if on-site analysis was not possible or inconclusive, samples could be shipped to OPCW Designated Laboratories.



Dr. Patricia Lewis, Director of International Security at Chatham House.

As the afternoon concluded, Mr Stefan Mogl put the discussion into an overall perspective. He reaffirmed the importance of education and outreach activities for the future of the CWC, reminded the audience that science and technology may lead to benefits as well as risks, and pointed out that the Organisation must be in a position to detect attempts to develop chemical weapons, and this requires, for example, adequate sampling and analysis methods and knowledge of new toxic chemicals.

The overall discussion was successful in bringing together the broad range of professions and interests of participants in the Third Review Conference. Audience participation included delegates from States Parties, scientists, educators, students, and NGOs. Participants discussed how greater appreciation is needed for the way in which new scientific developments change

chemical production and how these developments arise from communities that are not always aware of the security dimensions.

Notes

A video recording of this event is available at <http://www.opcw.org/rc3/webcasts/>.

A full description of the event, including speaker's biographies, can be found on the OPCW website at <http://ow.ly/mP411>.

Side Events

Strengthening the Global Norm Against Chemical Weapons

by Per Runn



This CWC Coalition Side Event was chaired by Gustavo Zlauvinen, Executive Chairman of the CWC National Authority in Argentina. Speakers included Yasemin Balci, the Verification Research, Training and Information Centre; Hassan Mashhadi, Green Cross; Bonnie Jenkins, United States; Lech Starostin, Tarnow International Centre for Chemical Safety & Security; and Muhammad Zuber, Indonesia.

The five presentations and discussion focused on two aspects: national implementation of the CWC and chemical safety and security. In relation to national implementation, it was recognised that significant progress has been made by the States Parties in adopting implementing legislation, but that much still remains to be done. At the same time it was noted that implementing legislation requires effective enforcement to meet the requirements of the CWC and that in the future, developments in international security, science and technology, and chemical industry can be expected to pose new challenges. To increase the number of States Parties with comprehensive implementation and legislation that can address these changes, it was suggested that cooperation on legal measures should be strengthened. It was also pointed out that raising awareness of CWC obligations and national regulations in relevant graduate education curricula could effectively support the implementation of the CWC.

While the term “chemical safety” is well established, it was noted that the concept of “chemical security” is still

maturing. Putting in place effective chemical security measures is integral to the implementation of the CWC by reducing the possibility of access to toxic chemicals and their precursors for purposes prohibited by the Convention.

The engagement of the OPCW in the area of chemical security was strongly supported. At the same time it was recognised that a large number of initiatives already exist in this area and that the OPCW should not duplicate these efforts but could play a role as a platform for bringing together actors in this area. The complexity of introducing effective chemical security measures was demonstrated by an example from Indonesia and the work undertaken in introducing the Responsible Care Security Code.

In conclusion, the discussion reinforced the importance of comprehensive national implementation of the CWC by all States Parties and that this is not a one-time exercise but requires constant adaptation to changing circumstances. The establishment of effective measures in the area of chemical security is one element of this. The OPCW needs to continue to provide support to the States Parties and work closely with other institutions and organisations to be able to meet the goal of universal effective implementation of the CWC and reinforcing the global norm against chemical weapons.

Dr. Per Runn is the former Head of the OPCW Policy and Review Branch and is now working as an independent consultant.

Side Events

Legacies of Chemical Weapons

by Vanessa Rehn and Paul Walker



This CWC Coalition Side Event was chaired by Paul Walker, Green Cross. Speakers included Irene Kornelly, Colorado Citizens' Advisory Committee, Pueblo, Colorado; Craig Williams, Chemical Weapons Destruction Advisory Board, Blue Grass, Kentucky; and Mohammed Al Sharaa, Iraqi National Monitoring Authority.

The side event sought to address the declared chemical weapons stockpiles still remaining in four States Parties – Russia, the United States, Libya, and Iraq.

Irene Kornelly and Craig Williams explained that the two CW stockpile sites in Colorado and Kentucky are the last remaining of nine declared sites in the US on which chemical weapons are held. The other seven, accounting for almost 90% of the US original CW stockpile, were safely eliminated over 22 years, from 1990 to 2012.

Because of the controversial nature of high temperature incineration, the US Congress initiated the Assembled Chemical Weapons Assessment (ACWA) Program in 1996, with the goal of identifying alternative destruction methods.

The ACWA initiative encouraged the active engagement of civil society. Elements such as transparency, meaningful involvement, and collective problem-solving resulted from this initiative, and indeed persist to date.

Strong commitment from all levels of government, along with unique partnerships with local citizens, make both Kornelly and Williams confident that their sites will remain on track with their schedules for destruction.

Dr. Mohammed al Sharaa, head of the Iraqi National Authority, explained that the situation in Iraq is very different from that in the US. During the 1991 Gulf War, bunkers containing chemical weapons were attacked by aerial bombs. The ensuing fires partially destroyed the contents of these bunkers, with the remainder destroyed by the UN Special Commission in the 1990s.

UNSCOM collected all chemical stockpile remnants and sealed them in two large bunkers. The result of these incidents was that these two bunkers today contain an unknown quantity of chemical agents and munitions but are highly contaminated, including unexploded ordnance, making their destruction especially risky, difficult, and costly.

The Iraqi team faces several challenges, such as their team's lack of scientific and technical knowledge with regard to this very unique type of munitions destruction and cleanup and difficulty accessing official UNSCOM documentation on the two bunkers. Al Sharaa explained that fruitful discussions with the OPCW Technical Secretariat have allowed the Iraqi team to develop a road map in creating a practical destruction plan and that Iraq is taking all necessary steps to facilitate the prompt destruction of the remnants of chemical weapons, in compliance with Article IV of the CWC.

Vanessa Rehn was an intern in the OPCW Office of Special Projects from August to December 2012, and holds a Master's Degree in Peace and Conflict Studies from Uppsala University. Dr. Paul F. Walker is director of Environmental Security and Sustainability with Green Cross International and Coordinator of the CWC Coalition.

Side Events

Open Forum

by Vanessa Rehn and Paul Walker

This CWC Coalition Side Event was chaired by Paul Walker, Green Cross. Speakers included Michael Crowley, University of Bradford; Dana Perkins, 1540 Committee; Rajiv Nayan, Institute for Defence Studies and Analyses; Sjoerd Looijs, European Chemical Industry Council; Maurizio Martellini, Landau Network-Centro Volta; Benjamin Ruiz-Loyola, National University of Mexico; and Terrance Long, International Dialogue on Underwater Munitions.

Rajiv Nayan spoke about the future of the CWC and the OPCW. Promoting universality of the Convention will remain crucial into the future, as will adapting to new security challenges as they arise. Norm-building against stockpiling and use of chemical weapons, as well as against the misuse of dual-use chemicals, has been achieved by the existence of both the CWC and the OPCW.

Sjoerd Looijs began an important discussion on the importance of collaborating with chemical industry in order for the OPCW to effectively implement its duties. The International Council of Chemical Associations (ICCA) welcomes the suggestion that a non-bureaucratic and constructive partnership be created, to serve as the appropriate mechanism through which industry vigilance and cooperation can become prominent.

Other UN bodies can also serve as relevant stakeholders, as was outlined in the presentation by Dana Perkins. The UNSC Resolution 1540 is synergistic with the CWC – it imposes binding obligations on all States Parties to adopt legislation preventing the proliferation of nuclear, chemical, and biological weapons. The OPCW is among the organisations that have offered assistance to States Parties in implementing Resolution 1540, a partnership which has proven fruitful and hence should continue over coming years.

Another theme at this side event was raising awareness of chemical weapons and the CWC in both the chemistry profession and the academic field. Maurizio Martellini spoke to the former, noting that the chemistry profession needs to be supported in such efforts. Tailored educational and informational material is one such way through which this can be achieved. Another method is through education at the university level, as Benjamin Ruiz-Loyola indicated. His School of Chemistry is implementing an extracurricular



programme for all Bachelor of Science majors, making students aware of their responsibility to society, and improving professional ethics.

Lastly, the side event enjoyed two presentations with a particular focus on chemical munitions and agents – specifically, riot control munitions and sea-dumped chemical weapons. Michael Crowley spoke on how ambiguity with regard to the type and means of delivery of riot control agents has been continually problematic throughout the CWC's history. Terrance Long spoke regarding sea-dumped chemical weapons. The environmental impact of decades of disposing of munitions in oceans, seas, and waterways, has been known since the 1970s. After the passage of a resolution by the United Nations General Assembly in 2010 calling on all States Parties to address sea-dumped chemical munitions and report back to the UN Secretary-General in 2013, it is no longer an option for the international community to ignore the issue.

Working together for a world free of
chemical weapons



www.opcw.org