



**ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS**

**Twenty-Seventh Session of the Scientific Advisory Board**

**Opening Remarks by the Deputy Director-General of the OPCW**

**OPCW Headquarters, The Hague, The Netherlands**

**19 March 2018**

---

*REMARKS AS DELIVERED*

Mr Chairperson,  
Distinguished members of the Scientific Advisory Board,  
Dear colleagues,

I am pleased to address you during this session when the Board is set to prepare its report on developments in science and technology for the Fourth Review Conference.

That Conference will take place at a crossroads on our path toward a chemical weapons free world. While the destruction of declared stockpiles of chemical weapons worldwide draws closer to completion, allegations of the use of chemical weapons continue to haunt us with horrifying frequency. This is a reminder that our efforts to strengthen the international norm against this class of weapon is just as relevant today as it was nearly 21 years ago, if not more.

Over the course of those years, the world has witnessed profound political, technological, social and economic change. This external environment, no matter how distant it may seem to the world of chemical disarmament, influences how we operate. Scientific and technological evolution is indeed as a key driver of change, and we continue to count on your expert guidance not only to keep pace with it but also to take full advantage of the opportunities it presents.

Your report, like those submitted by your predecessors to earlier review conferences, will bring valuable insight into advances unforeseen even just a few years ago. It will compel us to think critically and serve as a clarion call for an ever-greater degree of scientific literacy amongst our decision makers and CWC stakeholders.

Distinguished members of the Board,

Through the reports of your regular sessions and workshops, we have closely followed the progress of your scientific review. We continue to note with full satisfaction the breadth of your considerations and your ability to reach out across disciplinary boundaries. While examining the various issues and subjects assigned to you, you also demonstrated where the science, independent of discipline, intersects with the implementation of the Convention.

Your work has illustrated the immensity of the challenge to keep pace with developments in science and technology. Each year millions of publications and patents are being produced, trans-disciplinary innovation is increasing, and scientific interaction is being further facilitated through a vibrant virtual realm. Moreover, it has become clear that monitoring scientific progress alone will not determine if or how new technology might actually be misused.

The discussion of developments in science and technology has traditionally focused on challenges to security. Yet the risks from future science, while giving us pause for thought, yield uncertain conclusions. Article VIII mandates us to keep abreast of science and technology, but your work has taught us that we cannot undertake this mandate from a perspective of fear.

As concerns are raised about the potential for misuse, we are advised to monitor emerging technologies to see what might be on the horizon. However, the Secretariat's contingency operations and the ever-increasing risk of chemical terrorism have underlined that the current threats are related to the science of the past. Indeed, some of this science, for instance the chemical basis of the blistering action of sulfur mustard, is not fully understood even today, nearly 200 years since this chemical agent was discovered.

Along with keeping the Organisation up-to-date, you have also assisted the functioning of the OPCW Laboratory. Since the Third Review Conference, the Board has provided advice on the designation of laboratories for biomedical samples, biological toxin exercises, method development in chemical forensics, and the inclusion of relevant unscheduled chemicals in the OCAD. All of this has helped to ensure that the OPCW's Laboratory and the designated laboratories maintain and nurture their sampling and analysis capabilities.

We have also recognized the need for technical capacities unforeseen by the operational processes developed as the implementation of the Convention took shape. Non-routine missions have brought with them challenging and dangerous operating environments; limitations on the available equipment in the field; and a need for tools and methods to detect and identify chemicals outside the schedules.

The Secretariat's work has increasingly involved investigative and fact-finding activities, where evaluation of oral material and digital evidence is required before conclusions can be drawn. Accordingly, analysis tools that go beyond chemistry are required. Furthermore, political sensitivity around missions demands that the scientific methods and results are objective, accurate and incontrovertible and stand on their technical merits.

Distinguished members of the Board,

Given these requirements, the recommendations you will put forward to the Review Conference should push the science and technology discussions into new directions. We must seek to grasp the opportunities presented to us by scientific and technological change.

Your work has already taken steps in this direction, as seen in the report of the first meeting of the temporary working group (TWG) on investigative science and technology held last month. I commend Dr Borrett for her excellent chairing of the TWG; we look forward to following its further progress.

Going forward, the OPCW stands to benefit from the technical opportunities that the advancements in science can offer us. New technologies can be harnessed to further ensure the health and safety of inspectors in the field under hazardous situations, provide real-time indications of chemical release and exposure, and support our verification and assistance and protection activities.

At the same time, we must also remain vigilant to the future threats. A focus on scientific benefits must not come at the expense of recognizing and preparing for the future challenges. To this end, I was pleased to see in your reports an emphasis on technologies with the potential to identify unexpected and unusual biochemical change, independent of what technology might cause it.

Distinguished members of the Board,

Reflecting on your review, the Board brings value to the OPCW that goes beyond a strict advisory function. You have reached out to scientific communities with little to no familiarity of the Convention, brought together experts from across disciplinary and geopolitical boundaries, and addressed representatives of industry and government from a range of States Parties. Your methods for delivering sound advice have attracted attention from other scientific advisory mechanisms. And with members from 25 States Parties, the output and science diplomacy of the Board upholds the core values of the Convention: international cooperation and science for peace.

I have been highlighting the technical challenges, as well as opportunities for scientific collaboration, all important aspects of your work. Your mandate is to provide independent advice to the Director-General, which may ultimately inform inputs to policy discussions by the States Parties. In this regard, we must not lose sight of who are the recipients of your guidance.

We look to the Board as an example for scientific engagement with States Parties. Delegations regularly commend the Board for the quality of its work and some of them quote statements from its reports. This occurred most recently during the Open-Ended Working Group on the Preparation for the Review Conference, where permanent representatives referenced the reports of your 26th Session and the 1st meeting of the TWG on investigative science.

Your efforts in briefing States Parties and providing them with insight into your work through the Science for Diplomats events, has supplied a clearer connection between the scientific underpinnings of the Convention and the practicalities of its implementation. Your upcoming

report will cover much ground across a dynamic scientific landscape. Ongoing productive engagement with States Parties is key to seeing your recommendations move forward. The advice you impart and the thoughts it provokes, ensure that the scientific dimensions of our work are given due consideration.

Ladies and Gentleman,

Before closing, let me take this opportunity to welcome the four new members of the SAB: Professor Vladimir Dimitrov of Bulgaria, Dr Daan Noort of The Netherlands, Professor Syeda Sultana Razia of Bangladesh and Dr Yasuo Seto of Japan. I am pleased to see how the SAB continues to facilitate productive international science cooperation. Scientists from more than 40 nationalities have now shared their knowledge and experience to strengthen scientific literacy for chemical disarmament through this Board and its temporary working groups.

I also wish to thank the four members for whom this session marks the conclusion of their tenure. First, allow me to thank Professor Mohammad Abdollahi of the Islamic Republic of Iran, whose contributions are prominent in the Board's 2014 and 2015 intersessional reports on assistance and protection. Next I would like to thank Professor David Gonzalez of Uruguay, whose insights into green chemistry have provided useful advice on how this area of research intersects with the norms of the Convention. Next, I would like to thank Mr Francois Mauritz van Straten of South Africa, who served on the TWG on verification and took a lead role in producing many of the inputs for the upcoming report to the Fourth Review Conference. And finally, allow me to express my appreciation to the Board's Chair since 2015, Dr Christopher Timperley of the United Kingdom of Great Britain and Northern Ireland.

Dr Timperley has guided this Board through an intensive scientific review process, participated in the work of four TWGs and provided leadership that has given the Board visibility and praise from our States Parties. The enthusiasm and engagement seen across the membership of this Board serves a model to others, and I commend Dr Timperley for cultivating this working culture.

The commitment to the norms and objectives of the Convention from Board members past and present has strengthened its impact. I wish you all continued success in your endeavours.

Thank you for your attention. I wish you a productive Session and look forward to an informative and thought provoking report to the Fourth Review Conference.

\*\*\*\*\*