

EU Non-Proliferation and Disarmament Consortium

Promoting the European network of independent non-proliferation and disarmament think tanks

E-newsletter of the European Network of Independent Non-Proliferation and Disarmament Think Tanks

THE END OF CHEMICAL WEAPONS STOCKPILES, WHAT FUTURE ROLE FOR THE OPCW? AN INTERVIEW WITH ELISANDE NEXON



Elisande Nexon is a senior researcher at the Foundation for Strategic Research (FRS). Her main areas of research are public health issues related to defence and security, and the prevention, preparedness and response to biological and chemical threats. A doctor of pharmacy, she also holds a postgraduate diploma (DESS) in arms control and disarmament and a university diploma in biosafety and biosecurity.

In July the Organisation for the Prohibition of Chemical Weapons (OPCW) announced that all declared and verified chemical weapons stockpiles had been irreversibly destroyed. What does this mean for the OPCW as an organisation and what focus do you think its activities will have in the future?

Even if the violations of the non-use norm may have overshadowed it somewhat, the destruction of all declared and verified stockpiles is a significant milestone in the implementation of the Convention and a major success for the Organization. As this objective drew nearer, focus gradually shifted from the verification of destruction to other challenges. The evolution of the chemical industry landscape requires the industry inspection regime to be updated in order to remain relevant. It is thus necessary to address challenges pertaining to the growing number of inspectable facilities worldwide that fall under the scope of Article VI about activities not prohibited by the Convention.

While attention tends to focus on the state dimension given the current geopolitical context, the threat posed by non-State actors remain also important. The Organization has a role to play to prevent terrorism and the reemergence of chemical weapons, in particular through Article VII on national implementation measures and Article X on assistance and protection against chemical weapons. In this respect, capacity-building activities and the promotion of the peaceful uses of chemistry represent an important component for the OPCW, for example through initiatives such as the chemical safety and security management programme.

At last, it is also worth stressing that, during this transition period, the repeated use of chemical weapons by Syria followed by the attempted poisoning of Sergey Skripal also led to the emergence of a new attribution norm, the establishment of which remains contentious for some State parties as highlighted during the last Review Conference.

Despite the announcement, there are still concerns about chemical weapons such as in Syria, what are the main challenges for the OPCW's efforts to ensure total chemical disarmament?

The current geopolitical context and the polarization among CWC states parties, even more so after Russia's invasion of Ukraine, represent an obvious hindrance. As at the previous Review Conference, the States Parties failed to reach a consensus on the final document of the Fifth Review Conference.

However, unlike in the case of the BWC and its Support Unit, the OPCW's continued existence and functioning does not depend on a Review conference decision.

The current geopolitical context and the polarization among CWC states parties, even more so after Russia's invasion of Ukraine, represent an obvious hindrance. As at the previous Review Conference, the States Parties failed to reach a consensus on the final document of the Fifth Review Conference. However, unlike in the case of the BWC and its Support Unit, the OPCW's continued existence and functioning does not depend on a Review conference decision.

The destruction of declared stocks is officially complete, but the prevention of chemical weapons re-emergence and use is a key challenge. The problem of old munitions and dumped chemical weapons must be considered, as well as the possibility that certain countries, whether parties to the Convention or not, may hold undeclared stockpiles. In this context, maintaining within the OPCW knowledge and expertise about chemical weapons, their potential uses, means of detection, destruction and verification will be crucial.

In addition, the rapid developments in science and technology, with a growing convergence between chemistry and other fields such as biology or artificial intelligence represents a source of threat, with for example the potential development of new chemical warfare agents or new production methods. But they can also offer opportunities for more effective detection and verification which would contribute to strengthening the CWC. Reviewing S&T and its implications for the Convention will thus remain crucial.

How can the EU help counter the still persistent threat of chemical weapons use?

The EU is a very active player, but it is important that it keeps up its diplomatic, political and financial efforts. It is the main contributor of voluntary funding to the Organization through projects financed both through the EU budget and EU Member States' national budgets. In recent years it has for example contributed to the establishment of the new Centre for Chemistry and Technology and to enhancing cybersecurity for the OPCW.

Since 2010, the EU has also promoted capacity-building through one of its flagship programme, the Chemical, Biological, Radiological and Nuclear Risk Mitigation Centres of Excellence (CoE) Initiative, the EU's largest civilian external security programme with the voluntary involvement of 64 countries (2023), which aims at strengthening CBRN risk mitigation and promoting a global culture of safety and security through cooperation.

THE IMPACT OF BIOTECHNOLOGY ADVANCES ON ARMS CONTROL

Since negotiations for the Bioweapons Convention (BWC) were taken up in the 1960s, biotechnology has developed so fast that it is hard for regulators to keep pace. It has undergone a transformation from basic research to a global multi-billion-euro-business. And still, technological progress and misuse potentials prospected for the near future are groundbreaking.

Factors contributing to this transformation include, inter alia, various genome editing methods, synthetic biology including global mail order services for gene sequences (which in the foreseeable will be replaced by desk top synthesizers), and advances in DNA-sequencing; the growing convergence with other technological fields does the rest. Biological substances are produced in chemical plants and viceversa.

Artificial intelligence helps to understand and design complex molecules, such as peptides and proteins that work as bioregulators and effect all sorts of body functions, including psychological ones. These substances on the interface of biology and chemistry were theoretically long described as (mostly non-lethal) weapons, but they are moving fast from SciFi to a real option. While the old threats have not disappeared, the advances in biotechnology and related fields are paving the way for cheaper and easier access to and production of bioweapons agents. And drone (swarm) technology and others open possibilities for dispersal of those agents.

How this can translate into an actual threat depends in large part on how attractive biological warfare is to states and non-state actors to achieve their goals. In the past, we saw only limited interest in bioweapons, even among technically and financially well-positioned actors. Bioweapons with limited destructive potential, which could have been produced by terrorists or other criminals, are also rarely used.

For the first time since the failure of the verification protocol in 2001 the time is ripe for BWC member states to start a debate about issues such as what should today be understood as (non-) compliance, what activities and actors should be monitored, whether the scope of the convention includes bioterrorism or not, and how to get along with the risks associated with gain-of-function (GOF) experiments or dual-use research of concern (DURC).

BWC verification needs mechanisms that go well beyond the collapsed protocol that was envisioned more than two decades ago. A focus only on large-scale biopharmaceutical facilities would not be enough to effectively address the new challenges. It is therefore clear that any verification system must work directly with the planned S&T Advisory Board. In its present form, the BW treaty regime is rather blind to relevant developments.

In the end, BCW should become an instrument of preventive arms control. No matter how advanced technologies will evolve, transparency by all responsible actors, states, academia or private, remains of paramount importance.

Gunnar Jeremias, Head of the Hamburg Research Group for Biological Arms Control

Latest Publications

Russia's War in Ukraine: Ballistic and Cruise Trajectories. William Alberque, Douglas Barrie, Zuzanna Gwadera & Timothy Wright. IISS Research Report. September 2023

Challenges to multilateral arms control. Timothy Wright. IISS Research Article - Missile Dialogue Initiative. October 2023

Europe's Broken Order and the Prospect of a New Cold War. Kristi Raik & Eero Kristjan Sild. International Center for Defence and Security (ICDS)

The Biological and Toxin Weapons Convention Confronting False Allegations and Disinformation. Jean Pascal Zanders. EU Non-Proliferation and Disarmament Papers

Network Calls

The Center for Security Studies (CSS) at ETH Zurich is looking for a Cyber Defense Researcher for its Cyber Defense Project

More info: [Here](#)

The Flemish Peace Institute offers internships to mature students and recent graduates in the field of international relations, history, political sciences, conflict studies and related fields.

More info: [Here](#)

The Foundation for Strategic Research (FRS) is seeking to strengthen its research capabilities on issues related to missile technologies. A six-month internship is available as soon as possible. The trainee will participate in the FRS's activities on issues related to missile technologies and their use.

More info: [Here](#)

EU NEWS

EU COUNCIL MAINTAINS RESTRICTIVE MEASURES UNDER THE NON-PROLIFERATION SANCTIONS REGIME AFTER THE JCPOA TRANSITION DAY

ON OCTOBER 16, THE EU COUNCIL DECIDED TO TAKE THE NECESSARY STEPS TO MAINTAIN THE RESTRICTIVE MEASURES UNDER THE EU NON-PROLIFERATION REGIME ON IRAN. IT EVALUATED THAT THERE ARE VALID REASONS TO REFRAIN FROM LIFTING THESE RESTRICTIONS ON TRANSITION DAY (18 OCTOBER 2023), AS ORIGINALLY FORESEEN UNDER THE JOINT COMPREHENSIVE PLAN OF ACTION (JCPOA). THE COUNCIL'S DECISION IS IN LINE WITH THE PROVISIONS OF THE UN SECURITY COUNCIL RESOLUTION 2231 AND THE JCPOA, IN VIEW OF IRAN NOT FULFILLING ITS COMMITMENTS UNDER THE JCPOA, AS REPORTED BY THE INTERNATIONAL ATOMIC ENERGY AGENCY SINCE 2019.

THE EU COUNCIL ADOPTED LEGAL ACTS TO MAINTAIN THE DESIGNATIONS THAT HAD INITIALLY BEEN IMPOSED BY THE UNITED NATIONS FOR INDIVIDUALS AND ENTITIES INVOLVED IN NUCLEAR OR BALLISTIC MISSILES ACTIVITIES OR AFFILIATED TO THE ISLAMIC REVOLUTIONARY GUARD CORPS (IRGC). IT ALSO AGREED TO MAINTAIN SECTORAL AND INDIVIDUAL MEASURES, EXISTING UNDER THE EU'S SANCTIONS REGIME, NOTABLY THOSE RELATED TO IRAN NUCLEAR PROLIFERATION, AS WELL AS ARMS AND MISSILE EMBARGOES. THESE STEPS DO NOT AMOUNT TO THE IMPOSITION OF ADDITIONAL EU SANCTIONS ON IRAN. MOREOVER, ALL EU SANCTIONS THAT HAD ALREADY BEEN LIFTED UNDER THE JCPOA REMAIN LIFTED.

THIS DECISION IS IN LINE WITH THE EU'S COMMITMENT TO THE FULL IMPLEMENTATION OF THE JCPOA, AS EXPRESSED IN COUNCIL CONCLUSIONS IN DECEMBER 2022. THE DECISION FOLLOWS THE LETTER RECEIVED ON 14 SEPTEMBER 2023, BY THE EU HIGH REPRESENTATIVE AS COORDINATOR OF THE JOINT COMMISSION OF THE JCPOA, FROM THE FOREIGN MINISTERS OF FRANCE, GERMANY, AND THE UNITED KINGDOM WITHIN THE SETTING OF THE JCPOA'S DISPUTE RESOLUTION MECHANISM, THAT THEY HAD TRIGGERED IN JANUARY 2020. THE MINISTERS STATED THAT THEY STAND READY TO REVERSE THEIR DECISION, SHOULD IRAN FULLY IMPLEMENT ITS JCPOA COMMITMENTS.

MORE INFO: [HERE](#)

NETWORK NEWS

ALVA MYRDAL CENTRE ANNUAL CONFERENCE 2024

THE ALVA MYRDAL CENTRE (AMC) INVITES PROPOSALS FOR PAPERS, POSTER PRESENTATIONS, PANELS AND OTHER ACTIVITIES ON TOPICS RELEVANT TO NUCLEAR DISARMAMENT IN A BROAD SENSE FOR ITS 2024 ANNUAL CONFERENCE TO BE HELD IN 18-19 JUNE NEXT YEAR. AS AMC IS A CROSS-DISCIPLINARY CENTRE, IT WELCOMES PROPOSALS FOR ACTIVITIES AIMING TO BRIDGE THE GAP BETWEEN SOCIAL SCIENCES AND NATURAL SCIENCES. APPLICANTS CAN BE RESEARCHERS, POLICY MAKERS, STUDENTS AND THE INTERESTED PUBLIC FROM AROUND THE WORLD WHO SPECIALIZE IN OR ARE INTERESTED IN ISSUES PERTAINING TO NUCLEAR WEAPONS AND DISARMAMENT.

MORE INFO: [HERE](#)

THE ESA/ECSL EXECUTIVE COURSE

THE NEXT EDITION OF THE REGULAR EXECUTIVE COURSE WILL BE HELD ON 12-14 DECEMBER 2023. WHILE THE ECSL SUMMER COURSE IS A GREAT RESOURCE FOR STUDENTS, THE EXECUTIVE COURSE WILL DELIVER A HIGH-QUALITY AND TAILOR-MADE COURSE FOR GOVERNMENT REPRESENTATIVE AND INDUSTRY PROFESSIONALS, WITH A STRONG FOCUS ON THE PRACTICAL ASPECTS OF THE LEGAL DIMENSIONS RELEVANT FOR REGULATING AND CONDUCTING SPACE ACTIVITIES.

MORE INFO: [HERE](#)



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