

**Twenty-Seventh Session of the Conference of the States Parties (CSP-27) to the Chemical Weapons Convention,
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Chairperson, Director-General, Distinguished Delegates, Civil Society Colleagues,

The Chemical Weapons Convention (CWC) and the Biological and Toxin Weapons Convention (BTWC) were designed, with the inclusion of a General Purpose Criterion (GPC), to be comprehensive in the substances encompassed and responsive to technological change. Both are intended *inter alia* to cover and prevent weaponization of naturally occurring and synthetic toxins and bioregulators; the threat from which continues to grow with advances and convergence of the chemical and life sciences and associated technologies. However, through longstanding ambiguities, inconsistencies and failures in State implementation, the envisioned BTWC and CWC overlapping protection in reality masks a dangerous regulatory gap, which risks both regimes failing to effectively prevent development of toxin or bioregulator weapons.

In our new monograph *-Toxin and Bioregulator Weapons: preventing the misuse of the chemical and life sciences*¹ - Professor Malcolm Dando (University of Bradford) and I identify areas of concern meriting collective consideration by the CWC States Parties including:

- Biological and chemical weapons defence establishment research and associated activities related to toxins, bioregulators, bioregulatory pathways and physiological systems, and measures to facilitate agent dissemination and uptake. Whilst certain activities for protective purposes are not prohibited under the CWC, in some States there is a lack of clarity regarding intent, exacerbated by inadequate transparency.
- Military and associated institution research identifying, isolating and characterising a wide range of “novel” toxins with potential weaponization utility including those derived from indigenous stinging and poisonous plants, poisonous amphibians, reptiles, scorpions and marine animals.
- Military and associated institutional involvement in brain research projects including with simple animal models and non-human primates. Whilst purportedly benign, there are clear risks of malign application including development of bioregulator weapons to attack, influence or subvert human cognition, feelings and actions.
- Research, development and/or use of so-called less lethal weapons employing toxic chemicals of biological origin or their synthetic analogues, including central nervous system-acting chemicals, malodorants and riot control agents together with delivery mechanisms some of which can disperse agents over large areas or extended distances.

Consequently CWC States Parties should:

- Reaffirm the importance of the GPC as a vital safeguard ensuring the Convention’s comprehensive scope and future-proofed prohibition *inter alia* of all naturally occurring and synthetic toxin and bioregulator weapons.

¹ Crowley, M. and Dando, M., *Toxin and Bioregulator Weapons: preventing the misuse of the chemical and life sciences*, Palgrave Macmillan, November 2022.

- Establish a consultative process to develop guidelines on how the “types and quantities” principle of the GPC should be applied in practice. The consultative process should explore specific challenges to the GPC arising from contested interpretation as to the range of toxic chemicals (including toxins and bioregulators) and associated delivery mechanisms that could be legitimately employed for law enforcement, and the nature of what constitutes legitimate use.
- Strengthen routine OPCW monitoring and verification measures applicable to toxins and bioregulators, potentially including revision of the Schedules and/or modifying provisions relating to “Other Chemical Production Facilities”.
- Explore how the CWC and BTWC States Parties and organisations can work together more effectively to prevent hostile application of naturally occurring toxins, bioregulators, and their synthetic analogues. At the institutional level, the OPCW Technical Secretariat and the BTWC Implementation Support Unit should strengthen existing information exchange, cooperation, and collaboration to respond to the implications of the growing convergence of the chemical and life sciences.