

NGO Joint Statement

The CWC Schedules: Addressing Scientific and Technological Advances in the Fourth Industrial Revolution

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Chairman, Director-General, Distinguished Delegates, Civil Society Colleagues:

According to the General Purpose Criterion (GPC), codified in Article II of the CWC, any toxic chemical is a chemical weapon, unless intended for purposes not prohibited by the Convention. States Parties should reaffirm the GPC as ensuring the CWC's comprehensive scope and establish a consultative group to develop guidelines on how the 'types and quantities' principle of the GPC should be applied in practice.

The chemicals covered by the CWC Schedules have a special status. They are unequivocally subject to declaration requirements. They are the primary focus of OPCW inspectors and OPCW designated laboratories. Crafted when the Convention was negotiated, the CWC Schedules encompass toxic chemicals and precursors that had been relevant for 20th century chemical weapons programs. These Schedules were amended once, with two decisions adopted in 2019. Yet, as noted by the Director-General¹, "in the midst of the Fourth Industrial Revolution, the SAB's [Scientific Advisory Board's] latest report attests to a significantly transformed scientific and technological landscape" which "present[s] an ever-changing set of challenges to and opportunities for implementation of the Convention." Three areas that need particular attention are:

(1) Currently unscheduled chemical weapon agents and precursors for their synthesis. The 2019 amendment led to the addition of four new entries to CWC Schedule 1, three covering Novichok agents and one covering carbamates. No precursors for the synthesis of these agents were added. Moreover, recent events highlighted that there are other chemical weapon agents that are currently not covered by the CWC Schedules.

(2) Toxic CNS-acting chemicals. Many chemicals that act on the Central Nervous System (CNS) are highly toxic. However, only a single CNS-acting chemical is currently covered by the CWC schedules: the hallucinogenic chemical BZ. The 26th Conference of States Parties adopted a decision according to which aerosolized use of CNS-acting chemicals is understood to be incompatible with law enforcement purposes². And,

¹ Director-General (2023b) *Response to the Report of the Scientific Advisory Board on Developments in Science and Technology to the Fifth Special Session of the Conference of the States Parties to Review the Operations of the Chemical Weapons Convention*. RC-5/DG.2, OPCW, The Hague, 22 February. Page 2, para. 5.

² For the SAB's recommendation that the D-G consider establishing a TWG "to study current developments concerning CNS- acting chemicals" see Director-General (2023a) *Report of the Scientific Advisory Board on Developments in Science and Technology to the Fifth Special Session of the Conference of the States Parties to*

(3) *Biological toxins and bioregulators.* Biological toxins are toxic chemicals produced by microorganisms, animals, or plants. Only two biological toxins, ricin and saxitoxin, are covered by CWC Schedule 1. Bioregulators are chemicals produced by the human body that have an effect on its functioning, for instance by affecting neurotransmission. Some of them have the potential of being exploited as chemical weapons. However, no bioregulators are currently listed in the CWC Schedules.³

A thorough examination of these three issues and the need and possibility of making related additions to the CWC Schedules is recommended.

Additionally, the Schedules could be strengthened by replacing some of the entries that currently identify single chemicals with families of chemicals⁴, and they could also be streamlined by reducing the size of some of the listed families of chemicals. The complexity of the scientific advances also has to be acknowledged: they are not just related to the variety of novel potential chemical agents but also to our growing understanding of how physiological systems normal operations may be affected by such agents and how the agents may be dispersed and delivered.⁵

Thank you for your attention and we wish this statement to be part of the RC-5 official proceedings.

Review the Operations of the Chemical Weapons Convention. RC-5/DG.1, OPCW, The Hague, 22 February. Page 8, para. 31.

³ For further discussion of the potential malign application of toxins, bioregulators and related substances of biological origin see: Crowley, M. and Dando, M.R. (2022) *Toxin and Bioregulator Weapons: Preventing the Misuse of the Chemical and Life Sciences*. Palgrave Macmillan imprint of Springer Nature, Cham, Switzerland.

⁴ For more information on families of chemicals see Constanzi, S. and Koblenz, G. D. (2021) Strengthening controls on Novichoks: a family-based approach to covering A-series agents and precursors under the chemical-weapons nonproliferation regime. *The Nonproliferation Review*, **28**(1-3), 95-113.

<https://doi.org/10.1080/10736700.2021.2020010>.

⁵ Crowley, M. and Dando, M.R. (2022) op.cit.

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