OPCW **Review Conference**

Fourth Session
21 – 30 November 2018

RC-4/NAT.26
30 November 2018
ENGLISH only

JOINT PAPER

AEROSOLISATION OF CENTRAL NERVOUS SYSTEM-ACTING CHEMICALS FOR LAW ENFORCEMENT PURPOSES

1. This joint paper is issued on behalf of Albania, Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, Colombia, Croatia, Cyprus, Czech Republic, Ecuador, Estonia, Finland, Germany, Greece, Ireland, Japan, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Panama, Philippines, Poland, Portugal, Republic of Korea, Romania, Senegal, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom of Great Britain and Northern Ireland, United States of America, and Uruguay.

2. In statements at previous conferences and Executive Council meetings, some States Parties to the Chemical Weapons Convention ("hereinafter the Convention) have called for the Organisation for the Prohibition of Chemical Weapons (OPCW) to recognise new developments in the use of chemistry and increase the Organisation's focus on preventing the re-emergence of chemical weapons, including new types of potential chemical weapons agents. This paper identifies one such issue of concern and provides recommended actions that States Parties could take.

Discussion

3. Toxic (and potentially lethal) chemicals that target the central nervous system (CNS), so-called "incapacitating chemical agents or ICAs", and their potential use in certain law enforcement scenarios, have been discussed in numerous forums. We believe these chemicals pose a serious challenge for the Convention.

4. CNS-acting chemicals include compounds such as anaesthetics, sedatives and analgesics that have been developed for bona fide medical purposes and are designed to be delivered only under strict medical supervision with concurrent monitoring of the individual's well-being during their administration.

   (a) The 'fentanyls' (opioid receptor agonists) are probably the best known of the CNS-acting chemicals that have been used in law enforcement settings. However, this is not without danger; indeed some fentanyl analogues have lethal doses that are comparable to traditional nerve agents.

   (b) In addition to the 'fentanyls', there are other CNS-acting chemicals that have been associated with use in law enforcement, including dexmedetomidine and clonidine (α2 adrenergic receptor agonists), and halothane, isoflurane and sevoflurane (inhaled anaesthetics).

5. CNS-acting chemicals are not riot control agents (RCAs). RCAs are a unique category of chemical agents defined by and declarable under the Convention. Paragraph 7 of Article II of the Convention defines RCAs as any chemical that "can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure." Further, subparagraph 1(e) of Article III of the Convention requires States Parties to declare the "chemical name, structural formula and Chemical Abstracts Service (CAS) registry number, if assigned, of each chemical it holds for riot control purposes."

6. CNS-acting chemicals elicit physiological responses ranging from sedation, to anaesthesia, respiratory depression, unconsciousness, and death as dosages increase. To quote an informal paper circulated by Switzerland on the margins of the Nineteenth Conference of the States Parties, "RCAs make you run away from the scene, whilst ICAs (CNS-acting chemicals) make you fall down". RCAs are already effectively addressed under the Convention and thus are outside the scope of this paper and any recommendations included herein.

7. Individuals exposed to aerosolised CNS-acting chemicals face inherent safety risks that include potential long-term health effects. The effects from exposure depend on the dose received over time as well as a number of other factors including the individual's age, weight, gender, general well-being, and possible adverse interactions with other medications being taken.

8. Given the difficulties associated with uniformly disseminating these agents outside of a clinical setting, it is extremely challenging (if not impossible) to control an aerosolised dose received by an individual (or group of people). In addition, exposure to an aerosol is a function of concentration and time. Since an incapacitated individual may not (easily) escape from the contaminated area, he or she would likely be exposed to prolonged doses of the chemical that could result in permanent injury or death.

9. Given the above listed factors, CNS-acting chemicals cannot be dispersed by aerosol in a completely safe manner in law enforcement settings. This also raises concerns that CNS-acting chemicals could be used as chemical weapons.

Recommendations

10. We encourage States Parties to the Convention that have not yet done so to make their positions known, or to express their interest for further discussion, on the use of aerosolised CNS-acting chemicals in law enforcement. We also encourage all States Parties to associate themselves with future versions of this paper. We intend to provide an annual update to the Conference of the States Parties listing those States Parties that share the concerns expressed in this paper.

11. At previous OPCW meetings the following countries have called for further discussion, or have made national statements outlining their position on the development, stockpiling or use of CNS-acting chemicals (so-called "incapacitating chemical agents or ICAs"): Albania, Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, Colombia, Croatia, Cyprus, Czech Republic, Estonia, Finland, Germany, Greece, Ireland, Japan, Latvia, Lithuania, Luxembourg, Malaysia,

Malta, Mexico, New Zealand, Norway, Pakistan, Poland, Portugal, Republic of Korea, Romania, Slovakia, Slovenia, Switzerland, Turkey, the United Kingdom of Great Britain and Northern Ireland, the United States of America and Uruguay.

12. Moreover, we are looking to promote discussion on this issue among as many States Parties as possible, and with the OPCW Technical Secretariat. Such discussion should focus on developing concrete recommendations for how to address CNS-acting chemicals in a way that would significantly advance one of the OPCW's priorities – preventing the re-emergence of chemical weapons.

- - - o - - -