

"Central Nervous System Acting Chemicals – Considerations from the OPCW Scientific Advisory Board"

Conference of States Parties (CSP-22), 28 November 2017

SAB S&T report to RC-1 dated 23 April 2003 (RC-1/DG.2 paragraph 3.14):

- "The SAB was also aware of concerns about the development of new riot control agents (RCAs), and other so-called "non-lethal" weapons utilising certain toxic chemicals (such as incapacitants, calmatives, vomiting agents, and the like). There are specific provisions in the Convention that deal with RCAs and the legitimate use of toxic chemicals for law enforcement purposes."
- "The SAB noted that the science related to such agents is rapidly evolving, and that results of current programmes to develop such "non-lethal" agents should be monitored and assessed in terms of their relevance to the Convention. However, based on past experience and the fact that many of these compounds act on the central nervous system, it appears unlikely from a scientific point of view that compounds with a sufficient safety ratio would be found."

SAB S&T report to RC-2 dated 28 February 2008 (RC-2/DG.1 paragraph 2.3 and 3.14):

- "The SAB noted again the question of the use of incapacitating chemicals for law enforcement, pointing to the possibility that new compounds might be discovered that more closely fit the profile required of such agents. The SAB remarked, however, that in the past, only two types of chemicals acting on the central nervous system appear to have been developed into chemical-warfare agents or incapacitating agents for use in law enforcement."
- "The Director-General wishes to add that some aspects of the development of means of delivery of such incapacitants for law-enforcement purposes might be difficult to distinguish from aspects of a chemical weapons development programme. The potential risks to the Convention associated with advances in science and technology would increase significantly, should dedicated chemical weapons programmes exist and should they take advantage of new toxic chemicals."
- "There is therefore good reason to call for transparency in chemical-defence programmes, and to assess carefully the compatibility with the Convention of the development of weapons that employ toxic chemicals for law-enforcement purposes (including so-called non-lethal weapons)."

Director-General statement to RC-2 dated 7 April 2008 (RC-2/DG.2 paragraph 57):

- "Likewise, in due course, States Parties may also wish to look into developments related to incapacitating agents and address questions such as the effect on the Convention of their possible introduction for the purposes of law enforcement and of new means for their use."

Director-General statement to CSP-14 dated 30 November 2009 (C-14/DG.13 paragraph 161):

- "One other matter I wish to refer to is my perception about the need for the OPCW, at some stage in the not too distant future, to take stock of the growing interest on the part of some governments and civil society, in developments related to matters where the Convention might be - perhaps purposely - ambiguous or have lacunae, and which might impact on the ultimate effectiveness of the ban on chemical weapons. Incapacitants or non-lethal weapons is one such area when it comes to the exact types and quantities of chemicals and their permitted use."

SAB Report of 15th Meeting dated 14 April 2010 (SAB-15/1 paragraph 13.2):

- The SAB considered the history of the development of incapacitating chemical agents since the 1950s, including the fact that no chemical has been discovered or developed that satisfies the requirements of being able to produce almost instantaneous incapacitating effects which will last for some hours with no health risks to the exposed individuals.
- "The SAB recognised the complexities presented by riot control agents and incapacitating chemical agents, and their treatment under the Convention. It recalled that both the SAB itself and the Director-General had made reference to the matter on several occasions."

SAB Report of 16th Meeting dated 6 April 2011 (SAB-16/1 paragraph 10.4):

- A summary was provided on chemicals that had been considered incapacitating chemical agents from open literature.

- “Most incapacitating chemical agents emerged from drug programmes in the 1960s and 1970s, and are centrally acting compounds that target specific neuronal pathways in the brain. The most recent attention has focused on opioids of the fentanyl class. These are in clinical use as analgesics /anaesthetics, and in veterinary use for immobilising large animals. They are reported to have been components of the agent used in ending the siege of a Moscow theatre in 2002.”

SAB S&T Report to RC-3 dated 29 October 2012 (RC-3/DG.1 paragraph 12):

- “The Board considers the term ‘non-lethal’ as inappropriate when referring to chemicals intended for use as incapacitants, because for all chemicals toxicity is a matter of dosage.”
- “The Board noted that chemicals considered having high safety margins in the context of controlled pharmaceutical use can have very low safety margins in the context of incapacitants when factors such as uneven dissemination, variability in human response, and the possible need for rapid onset are required.”
- “Pharmaceutical companies commonly publish toxicity data that have been obtained from experimentation on small rodent species, and this may not extrapolate to higher species. In particular, there are large species differences in the reaction to morphine-like drugs such as fentanyls, which appear to have attracted the greatest attention as potential incapacitants.”
- **“In the view of the SAB the technical discussion on the potential use of toxic chemicals for law enforcement purposes has been exhaustive.”**
- “The SAB recommends that the Secretariat start preparations for verification activities, relevant to incapacitating chemicals that could be required in an investigation of alleged use (IAU). Such preparations should include developing analytical methods and procedures, as well as collecting analytical reference data for the analysis of such chemicals. The Secretariat should invite laboratories in Member States to contribute to this effort.”

Director-General response to SAB dated 31 January 2013 (RC-2/DG.2 paragraph 15):

- “Since the Second Review Conference, the SAB has conducted a thorough review of the issue of incapacitating chemical agents.”
- “The Director-General would like to draw the attention of States Parties to the SAB’s assessment that the technical discussion on the potential use for toxic chemicals for law enforcement purposes has been exhaustive.”
- “Regarding the SAB’s recommendation that the Secretariat ‘start preparation for verification activities’, the Secretariat will pursue efforts to enhance its chemical-analysis capabilities and will work with designated laboratories on this issue.”

SAB Temporary Working Group Report on Verification dated June 2015 (page 7):

- “The TWG also considered the increasing number of facilities that produce DOCs at low production volumes. Products such as highly active pharmaceutical ingredients (HAPI), e.g. powerful opioids used in anaesthesia ... may be highly relevant to the purpose of the Convention”.

Executive Council, Medium Term Plan 2017-2021 dated 8 April 2016 (EC-83/S/1 paragraph 13):

- “The Organisation will also address the relevance of a broader spectrum of toxic chemicals and their precursors that may fall within its mandate, ranging from toxic industrial chemicals ... to chemicals used for example in medicine and law enforcement, including those acting on the central nervous system.”

SAB response to the Director-General’s request to provide consideration on which Riot Control Agents are subject to Declaration under the Chemical Weapons Convention dated 27 March 2017 (SAB-SAB-25/WP.1):

- “42 additional chemicals considered by the SAB might also be provided as a reference list of substances that do not meet the criteria of an RCA (and thus should not be declared as such) but have historically been considered for use as an RCA”.