Presentation by Dr Michael Crowley, Bradford University/Omega Research Foundation,

4<sup>th</sup> CWC Review Conference, Organisation for the Prohibition of Chemical Weapons, 21-30 November 2018, The Hague, Netherlands

Your Excellencies, Ladies and Gentlemen,

The following remarks draw upon ongoing joint research by Bradford University and the Omega Research Foundation, documented in previous public reports<sup>1</sup>, additional briefing papers to CWC States Parties, and included in the recently published Royal Society of Chemistry book *Preventing Chemical Weapons*<sup>2</sup> and associated *Science* article<sup>3</sup>.

The use of riot control agents (RCAs) as a method of warfare is prohibited under the Chemical Weapons Convention (CWC). The Convention, however, permits the employment of such chemicals for law enforcement including domestic riot control purposes, provided they are used in "types and quantities" consistent with such purposes.

Whilst CWC States Parties are prohibited from developing RCA munitions for use in armed conflict, they may manufacture, acquire and utilise delivery systems to disseminate appropriate "types and quantities" of RCAs for law enforcement. However, there is continuing ambiguity as to the nature and specifications of those means of delivery that are prohibited under the Convention. This ambiguity has potentially dangerous consequences, allowing divergent interpretations, policy and practice amongst States Parties to emerge.

Of particular concern are the implications for the regulation of "wide area" delivery mechanisms capable of disseminating RCAs (or other toxic chemicals) over large areas or extended distances and related development of "remote control" RCA means of delivery - incorporating automatic or semi-automatic systems where the operator is directing operation of the platform and/or RCA delivery device at a distance from the target.

Our investigations have uncovered the development and promotion by a range of State and commercial entities of a wide variety of such RCA means of delivery including: indoor fixed-installation dispersion devices; external area clearing or area denial devices; automatic grenade launchers; multiple munition launchers; large caliber RCA projectiles and munitions, and delivery mechanisms mounted on unmanned ground vehicles and unmanned aerial vehicles (drones).

Inadequate regulation of such "wide area" and "remote control" RCA means of delivery has potentially serious consequences, including:

<sup>&</sup>lt;sup>1</sup> Crowley, M. Tear Gassing by Remote Control: The development and promotion of remotely operated means of delivering or dispersing riot control agents, Bradford University/Omega Research Foundation/Remote Control Project, December 2015; Crowley, M. Drawing the Line: Regulation of "wide area" riot control agent delivery mechanisms under the Chemical Weapons Convention, Bradford University/Omega Research Foundation, April 2013.

<sup>&</sup>lt;sup>2</sup> Crowley, M., Dando, M., Shang, L. (eds) Preventing Chemical Weapons: Arms Control and Disarmament as the Sciences Converge, Royal Society of Chemistry, August 2018.

<sup>&</sup>lt;sup>3</sup> Crowley, M. Shang, L., Dando, M. Preventing chemical weapons as sciences converge, Science, 16 November 2018, volume 362, Issue 6416, pp.753-755

*Employment in armed conflict:* In previous conflicts RCA means of delivery were employed to drive enemy forces from fortified positions; to disable and incapacitate large numbers of combatants; or in conjunction with conventional arms. More recently, a range of contemporary RCA means of delivery, including certain "wide area" and "remote control" devices, have been promoted for use in counterinsurgency operations or urban warfare.

Misuse to facilitate large scale human rights abuses: This could include the blanket application of significant quantities of RCAs against large peaceful gatherings resulting in *en masse* ill-treatment or punishment; or the employment of RCA means of delivery in conjunction with firearms as a "force multiplier", making such force more deadly.

*Proliferation to and misuse by non-State actors:* Current commercial availability of "wide area" and "remote control" RCA means of delivery including for example via drones raises the danger of their acquisition and employment by a range of non-State actors including armed opposition forces, unregulated private military and security companies, and terrorist organisations.

To date the majority of "wide area" or "remote control" RCA delivery mechanisms we have documented do not currently appear to have been utilised by police or security forces. However we may now be at a tipping point – where proliferation, use and misuse may be beginning. A very troubling indication of what could lie ahead was witnessed from the end of March 2018 when for the first time a Middle East State employed drones which flew above large crowds of protestors dropping tear gas projectiles onto the people below.

Despite the ongoing development and promotion of a range of "wide area" and "remote control" RCA means of delivery of potential concern, none of the OPCW policy making organs have effectively addressed this situation to date. However we note and very much welcome the interventions by the Scientific Advisory Board (SAB) on this issue, initially in their report to the 3<sup>rd</sup> Review Conference and now in their April 2018 report to the 4<sup>th</sup> Review Conference. In this report the SAB highlight the "continued development, testing, production and promotion of diverse munitions systems capable of disseminating RCAs by remote control" and warn that "availability of such systems opens up the possibility that they could be filled intentionally with alternate types of chemicals including CWAs [chemical warfare agents] or CNS-acting compounds."

Given the concerns we and the SAB have highlighted, we recommend that the OPCW and its Member States should:

- Conduct a review of the existing constraints, under relevant international law (notably international human rights law), upon the use of RCA means of delivery in law enforcement;
- Develop a process for determining which means of RCA delivery are prohibited under the CWC:
- Strengthen existing RCA declaration and reporting measures, and explore the feasibility and utility of introducing appropriate monitoring and verification measures:
- Utilise existing CWC consultation, investigation and fact-finding mechanisms where
  activities of potential concern come to the attention of Member States, such as the reported
  development, production, marketing, transfer, stockpiling or use of inappropriate RCA
  means of delivery.

Given the evident dangers arising from the unregulated production, proliferation and potential misuse of "wide area" and "remote control" RCA means of delivery, we believe that the OPCW should address this issue as a matter of urgency. This Conference provides an appropriate forum to begin this process.

Thank you for your kind attention, and I request that this statement be made part of the Review

Conference on-line record.