Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction

25 July 2019

English only

**2019 Meeting** Geneva, 3-6 December 2019

Meeting of Experts on Assistance, Response and Preparedness Geneva, 6-7 August 2019 Item 9 of the provisional agenda Exploration of means to prepare for, respond to and render assistance in case of the possible hostile use of biological agents and toxins against agriculture, livestock as well as the natural environment

> Possible hostile use of biological agents and toxins against livestock: Existing support mechanisms by relevant international organizations and capacity building efforts by Canada through the G7-Led Global Partnership Against the Spread of Weapons and Materials of Mass Destruction

Submitted by Canada

### I. Introduction

1. This paper aims to contribute to the discussion, within the Meeting of Experts on Assistance, Response and Preparedness (MX4) on the agenda item of "Exploration of means to prepare for, respond to and render assistance in case of the possible hostile use of biological agents and toxins against agriculture, livestock as well as the natural environment." The paper focuses in particular on the question of the international response to the possible hostile use of biological agents and toxins against livestock and on the assistance that international organizations can provide to States in need. It also provides an overview of the support that Canada has recently provided to relevant international institutions to enhance their preparedness to address such events.

# **II.** Support that States can receive from international organizations, and challenges

2. The response to large-scale animal disease outbreaks is a complex undertaking that can rapidly exhaust capacities of many countries, particularly if it is a transboundary disease. Controlling the spread and ending such an outbreak may become even more challenging, if it is caused by deliberate use of biological agents. International support to rapidly contain





animal health emergencies is key to preventing the wider spread and to avoid such events having adverse and potentially global consequences.

3. International organizations that are specifically mandated to provide support, upon request, to States in mitigating the consequences and implications of outbreaks of animal disease are chiefly the World Organisation for Animal Health (OIE) and the Food and Agriculture Organization of the United Nations (FAO). In case of events involving disease transmissible from animals to humans (*i.e.* zoonotic disease), the World Health Organization (WHO) would also play a role.

4. The important role of these organizations, *inter alia*, has also been noted by successive Review Conferences of the Biological Weapons Convention (BWC). The States Parties have indicated that in the event that Article VII is invoked, "the United Nations could play a coordinating role in providing and delivering assistance under the Convention, with the help of States Parties as well as the *appropriate intergovernmental organizations*, in accordance with their respective mandates, such as the World Health Organization (WHO), the World Organisation for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO), and the International Plant Protection Convention (IPPC)" (emphasis added).<sup>1</sup> The Eighth Review Conference also stressed that "the capacities and experiences of United Nations and relevant international organizations should be identified and used, within their mandates, when required and upon request of the concerned State Party."<sup>2</sup>

#### a) The OIE

5. The OIE is mandated to improve animal health worldwide. It fosters transparency of the global animal disease situation and the implementation of international standards required for the prevention, detection and control of important animal diseases and zoonoses. The OIE supports an all-hazards approach for the management of natural, accidental or deliberate biological incidents.<sup>3</sup> In 2015, this approach was further spelled out with the adoption of the OIE Biological Threat Reduction Strategy.<sup>4</sup>

6. Pursuant to the Terrestrial and Aquatic Animal Health Codes, OIE's Member Countries are obliged to make available to other Member Countries, through the OIE, whatever information is necessary to minimise the spread of important animal diseases, and to assist in achieving better worldwide control of these diseases.<sup>5</sup> Each Member Country undertakes to report the notifiable and emerging animal diseases that it detects on its territory 5within 24 hours, including diseases with zoonotic potential.<sup>6</sup> Since 2002, the OIE has also commenced an active search for non-official information and rumours relating to animal health and public health.<sup>7</sup> This information does not become official, and is not disseminated, until it has been verified and confirmed by the concerned National Delegate. The OIE then disseminates the information to its Member Countries, immediately or periodically depending on the seriousness of the disease via e-mail, a weekly bulletin and the World

<sup>&</sup>lt;sup>1</sup> See BWC/CONF.VIII/4, Final Declaration, Article VII, para. 37. See also BWC/CONF.VI/6, Final Declaration, Article VII, para. 34; and BWC/CONF.VII/7, Final Declaration, Article VII, para. 36.

<sup>&</sup>lt;sup>2</sup> BWC/CONF.VIII/4, Final Declaration, Article VII, para. 39.

<sup>&</sup>lt;sup>3</sup> See OIE Guidelines for Investigation of Suspicious Biological Events, March 2018, available at http://www.oie.int/fileadmin/Home/eng/Our\_scientific\_expertise/docs/pdf/Guidelines\_Investigation\_ Suspicious\_Biological\_Events.pdf, p. 2.

<sup>&</sup>lt;sup>4</sup> The Strategy is available at: http://www.oie.int/fileadmin/Home/eng/Our\_scientific\_expertise/ docs/pdf/A\_Biological\_Threat\_Reduction\_Strategy\_jan2012.pdf.

<sup>&</sup>lt;sup>5</sup> Arts. 1.1.2 of the Terrestrial Animal Health Code and of the Aquatic Animal Health Code.

<sup>&</sup>lt;sup>6</sup> Arts. 1.1.3 and 1.1.4 of the Terrestrial Animal Health Code and of the Aquatic Animal Health Code. For the current OIE listed diseases, see http://www.oie.int/animal-health-in-the-world/oie-listeddiseases-2019/.

<sup>&</sup>lt;sup>7</sup> See http://www.oie.int/animal-health-in-the-world/the-world-animal-health-information-system/activesearch/.

Animal Health Information System (WAHIS) Interface.<sup>8</sup> Verified information is also made public on the OIE website.

7. The response to outbreaks of animal disease is mainly conceived within the OIE through the national veterinary services and the services of experts from a network of 254 Reference Laboratories (covering 106 diseases or topics in 37 countries), and 58 Collaborating Centres (covering 50 topics in 28 countries). By relying on this network, the OIE can assist requesting countries by facilitating access to expert advice on, or to assess measures to control, the spread of disease. The OIE could also provide scientific support and guidance options for detection and control for other countries that may be at risk. For response missions, the OIE relies on the FAO's operational capability (see below). Within this approach and in the context of its Biological Threat Reduction Strategy, the OIE also developed guidelines for veterinary services for the investigation of suspicious animal disease events by establishing an *ad hoc* group of international and national experts.<sup>9</sup>

#### b) The FAO

8. The FAO is a humanitarian agency that leads international efforts to defeat hunger, by achieving food security for all. Its mandate does not explicitly refer to deliberate use of disease. However, its activities include impact mitigation of emergencies affecting food security and response measures for sudden and slow-onset disasters. These cover transboundary pests and animal diseases, whatever the cause. Moreover, in December 2017, preparedness for and response to accidental and deliberate disease has been explicitly mentioned in the context of the 11<sup>th</sup> Steering Committee Meeting to review the activities and approve a new Strategic Action Plan for the FAO-OIE Emergency Management Centre for Animal Health (EMC-AH).<sup>10</sup>

9. For early warning, FAO conducts disease intelligence and risk assessment using its Global Animal Disease Information System (EMPRES-i),<sup>11</sup> a web-based application which gathers, passively and proactively, information from a variety of sources, including country offices, partner NGOs, government Ministries, public domains, the media and web-based health surveillance systems. Once verified through official and unofficial sources, this information is placed on the EMPRES-i system. Following the creation of the FAO-OIE-WHO Global Early Warning System for Major Animal Diseases Including Zoonosis (GLEWS), which is addressed more in detail in section III below, the FAO decided to establish a specific GLEWS Unit to work on disease intelligence, early warning, rapid risk assessment and to improve collaboration and coordination within the Tripartite GLEWS.<sup>12</sup>

10. The EMC-AH is FAO's rapid response mechanism to animal disease emergencies.<sup>13</sup> Located within FAO Headquarters in Rome, the Centre is a joint arm of FAO's Animal Production and Health and Emergency and Rehabilitation Divisions and operates in close collaboration with OIE. When zoonotic diseases and human health are involved, the Centre also cooperates with the WHO. Through the deployment of teams of international and national experts drawn from rosters and collaborating centres from both the FAO and OIE

<sup>&</sup>lt;sup>8</sup> WAHIS includes an alerts application sending immediate notifications of disease alerts and OIE follow-up reports to the users' portable devices. The System is currently undergoing an upgrade, see http://www.oie.int/animal-health-in-the-world/the-oie-wahis-project/.

<sup>&</sup>lt;sup>9</sup> The guidance aims to develop broad guidelines to identify triggers for suspicious events, aspects related to field operations, including sampling, and training and education. This activity stemmed from a recommendation from the 1<sup>st</sup> OIE Conference on Biological Threat Reduction, held in Paris, France, in June 2015. See OIE Guidelines for Investigation of Suspicious Biological Events, *cit.*, *supra* fn. 3.

<sup>&</sup>lt;sup>10</sup> See http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1070519/.

<sup>&</sup>lt;sup>11</sup> See http://empres-i.fao.org/eipws3g/.

<sup>&</sup>lt;sup>12</sup> See paragraph 16.

<sup>&</sup>lt;sup>13</sup> See http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1070519/.

on receipt of a request for field assessment and support missions, the Centre can assist the requesting State in developing rapid solutions to help prevent or stop the spread of the disease, as well as with the definition of medium and long term recovery plans.<sup>14</sup> The Centre relies on a global network of veterinary and operations experts within FAO and partner organizations, such as the OIE and WHO in case of zoonoses. The Centre also proposes capacity-building for better emergency preparedness and response through its 'Good Emergency Management Practices' (GEMP) programme.

c) The WHO (in case of zoonoses)

11. Diseases at the interface between humans, animals and the environment represent another area impacting public health and the social and economic well-being of the population, locally/nationally, regionally and internationally. As mentioned above, zoonoses are transmissible from animals to humans through direct contact or though food, water and the environment<sup>15</sup>, either naturally, accidentally or deliberately. They comprise a large percentage of all newly identified infectious diseases as well as existing infectious diseases. Animal cases, moreover, can serve as "sentinels" of a possible/imminent outbreak among humans, while at times alert of human cases can precede animal occurrence of disease.

12. The WHO addresses the early detection and assessment of zoonotic events affecting human health, as well as their public health consequences, as per its mandate under the International Health Regulations (2005). It also provides support to the State(s) requesting assistance in handling such consequences.

13. Cross-sectoral collaboration, including with the security sector is key to understanding and managing public health risks at the human-animal-environment interface and improving global health security. Cooperation among the WHO, the OIE and the FAO in this area is addressed in section III, below.

#### d) INTERPOL

14. Given the potential transnational impact of the deliberate use of animal disease by non-state actors, the International Criminal Police Organization (INTERPOL) could also provide support to the law enforcement authorities of requesting States by assisting criminal investigations, including through the deployment of an Incident Response Team (IRT). Assistance provided by the IRTs includes promoting access to relevant INTERPOL databases, operational analytical support as well as assistance and advice with investigative techniques. The Organization could also support local authorities with aspects related to police cooperation with other States, including through secure communications channels for information sharing and the identification of forensic expertise, as needed. Prior to any confirmation of support, INTERPOL will be required to assess the situation particularly in light of Article 3 of its Constitution, referred to as "the neutrality clause", which prevents INTERPOL from undertaking "any intervention or activities of a political, military, religious or racial character."<sup>16</sup>

## III. Cooperation mechanisms at the human-animal health interface

15. Inter-agency cooperation in the human-animal interface is longstanding and quite well developed, both bilaterally and multilaterally. This has been made possible by the fact that these organizations have common goals and use very similar structures and tools, so

<sup>&</sup>lt;sup>14</sup> See http://www.fao.org/emergencies/how-we-work/prepare-and-respond/cmc-animal-health/en/.

<sup>&</sup>lt;sup>15</sup> See https://www.who.int/zoonoses/en/.

<sup>&</sup>lt;sup>16</sup> See https://www.interpol.int/Who-we-are/Legal-framework/Legal-documents.

resources can be combined. Tripartite cooperation among the FAO, OIE and WHO has been formalized through an agreement in 2006 with the establishment of the above-mentioned GLEWS, which was enhanced in 2013 with the revised GLEWS+ framework.<sup>17</sup> A memorandum of understanding regarding cooperation to combat health risks at the animal-human-ecosystems interface was also signed among the three organizations in 2018.<sup>18</sup> GLEWS tripartite activities were initiated with support from the Canadian International Development Agency (CIDA) in 2007-2010.

16. Cooperation between the three organizations in early detection of major health events is established under the GLEWS platform hosted by FAO to share information on threats affecting animals, humans and wildlife. This collaboration is further developed within the recently established WHO Epidemic Intelligence from Open Sources (EIOS) platform, while inter-agency cooperation mechanisms used in the human health sector, such as the Global Outbreak and Alert and Response Network (GOARN) would also be used in the case of zoonoses. On the other hand, there are no agreements in place between INTERPOL and FAO, OIE and WHO, respectively, and INTERPOL does not participate in the above-mentioned mechanisms.

## IV. Challenges for an international response deriving from a deliberate outbreak of animal disease

17. The general challenges for an international response deriving from a deliberate outbreak and from a request of assistance pursuant to Article VII of the BWC were outlined in a working paper submitted by Canada to the 2018 Meeting of Experts on Assistance, Response and Preparedness.<sup>19</sup> In general terms, the mechanisms and technical activities of international organizations for detecting and responding to outbreaks of disease in animals would essentially remain the same whether the origin of the outbreak is a natural event, an accidental or a deliberate release. However, operations in a deliberate context would raise the political and operational challenges described in the abovementioned paper and would impact on the engagement and operational modalities of intervening international organizations. Response activities would have to factor in those challenges.

18. The core mandate of organizations such as the FAO and OIE is food and agriculture, animal-related and/or humanitarian in nature. Procedures within such agencies do not specifically address situations of deliberate use, and consideration of the possible consequences of such use on routine procedures and related actions has commenced only recently. While they have been considering this matter and preparing for possible operations

<sup>&</sup>lt;sup>17</sup> See http://www.glews.net/?page\_id=1059. For the text of the agreements, see "Global Early Warning System for Major Animal Diseases, including Zoonoses", 2006 ("GLEWS Agreement"), available at http://www.fao.org/docs/eims/upload/217837/agre\_glews\_en.pdf. See "GLEWS+. The Joint FAO–OIE–WHO Global Early Warning System for health threats and emerging risks at the human–animal–ecosystems interface. A concept paper", 2013.

<sup>18</sup> Memorandum of understanding between the FAO, OIE the WHO regarding cooperation to combat health risks at the animal-human-ecosystems interface in the context of the "one health" approach and including antimicrobial resistance", signed on 30 May 2018, available at http://www.oie.int/fileadmin/Home/eng/Media Center/docs/pdf/onehealthportal/MoU Tripartite Signature\_May\_30\_2018.pdf. This represents the formalization of a series of tripartite declarations on cooperation among the three organizations issued starting from 2010 (see "FAO, the OIE and WHO: Sharing responsibilities and coordinating global activities to address health risks at the human-animal-ecosystems interfaces," April 2010, pp. 2, 3 and 5, available at http://www.oie.int/fileadmin/Home/eng/Current\_Scientific\_Issues/docs/pdf/FINAL\_CONCEPT\_ NOTE\_Hanoi.pdf, and "The Tripartite Commitment. Providing multi-sectoral, collaborative challenges," leadership in addressing health October 2017, available at http://www.oie.int/fileadmin/Home/eng/Media\_Center/docs/pdf/Tripartite\_2017.pdf).

<sup>&</sup>lt;sup>19</sup> BWC/MSP/2018/MX.4/WP.8, pp. 4 and ff.

to support States within a deliberate/security context, those organizations remain true to their technical or humanitarian mandate and related operating principles.

19. For inter-agency communication, particularly with reference to the above-mentioned coordination mechanisms, the question arises as to whether and how their operations would change in the context of a deliberate event at local/national, regional and international levels. Whereas elements of these mechanisms follow the same all-hazards approach as the participating organizations, they have not been conceived for nor are they directly transferrable in case of deliberate events. One of the potential bottlenecks in a response operation could be *inter alia* the impact of security on the organizations' ability to share information among themselves, even within agreed cooperation frameworks.

### V. Canada's support, particularly in the context of the G7-led Global Partnership Against the Spread of Weapons and Materials of Mass Destruction

20. The Sixth, Seventh and Eighth Review Conferences of the BWC encouraged "the States Parties to continue strengthening existing international organizations and networks working on infectious diseases, in particular those of the WHO, FAO, OIE and IPPC, within their respective mandates."<sup>20</sup>

21. In recent years, the Government of Canada, through its Weapons Threat Reduction Program (WTRP)<sup>21</sup>, has been providing support to those organizations and their members to prepare for an animal disease outbreak of a deliberate nature.

22. For example, Canada has supported the implementation of the OIE Bio-Threat Reduction Strategy, which was adopted in 2015 to promote enhanced protection against threats from deliberate and accidental release of animal pathogens. In this context, it supported two OIE biennial conferences on bio-threat reduction in Paris, France in 2015 and in Ottawa, Canada, in 2017, and promoted the development of the above-mentioned guidelines for national veterinary services for investigation of suspicious biological events.<sup>22</sup>

23. Canada also supported the WHO and OIE to develop the IHR-PVS National Bridging Workshops, a widely used methodology to improve the coordination of the human health and the veterinary sector for the detection, reporting and response to zoonotic events, as required by the International Health Regulations (2005)<sup>23</sup>.

24. Canada is currently supporting an OIE-FAO-INTERPOL project, which aims to build global resilience against agro-terrorism and agro-crime. The project aims to strengthen global capacity to respond to animal health emergencies that result from the intentional release of animal pathogenic biological agents by: 1) assessing global agro-terrorism and agro-crime trends and threats; 2) building national capacity for emergency management in specific countries or regions through training, simulation exercising and testing; and 3) improving national, regional and global coordination between national veterinary services and law enforcement agencies in response to an international emergency.

<sup>&</sup>lt;sup>20</sup> BWC/CONF.VIII/4, Final Declaration, Article X, para. 64.a; BWC/CONF.VI/6, Final Declaration, Article X, para. 55.i; BWC/CONF.VII/7, Final Declaration, Article X, para. 54.a.

<sup>&</sup>lt;sup>21</sup> Global Affairs Canada's WTRP (initially known as the Global Partnership Program) is Canada's contribution to the G7-led *Global Partnership (GP) Against the Spread of Weapons and Materials of Mass Destruction* (www.gpwmd.com). During its 2018 Chairmanship of the 31 member GP, Canada identified "Strengthening Global Mechanisms and Capacities for Investigating and Responding to the Deliberate Use of Biological Agents" as a top priority.

<sup>&</sup>lt;sup>22</sup> See fn. 3 *supra*.

<sup>&</sup>lt;sup>23</sup>See https://extranet.who.int/sph/ihr-pvs-bridging-workshop#parallax-resources.