

Ninth Review Conference 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 November 2022

English only

Geneva, 28 November-16 December 2022

Item 11 of the provisional agenda

Consideration of issues identified in the review of the operation of the Convention as provided for in its Article XII and any possible consensus follow-up action

Establishment of a National Inventory of Dangerous Pathogens. An illustrative example of the implementation of Articles IV and X

Submitted by Sri Lanka and the Netherlands

I. Background

1. Since 2006, the European Union (EU) has supported the Biological and Toxin Weapons Convention (BTWC) by means of Joint Actions and Council Decisions in the framework of the EU Strategy against Proliferation of Weapons of Mass Destruction¹.
2. EU Council Decision 2019/97² aims to support implementation of the BTWC on the international, regional and national levels through six major projects: (1) Promoting universal adherence to the BTWC; (2) Capacity building in support of BTWC implementation; (3) Fostering biosecurity networks in the Global South; (4) Supporting the inter-sessional programme and preparations for the Ninth BTWC Review Conference; (5) Strengthening preparedness of States Parties to prevent and respond to attacks involving biological agents; (6) Enabling tools for awareness-raising, education and engagement.
3. In the framework of EU Council Decision 2019/97, Sri Lanka has requested assistance on the implementation of a National Inventory of Dangerous Pathogens (NIDP) and support regarding biosecurity and dual-use risk assessments and awareness raising activities.
4. The Netherlands attaches great importance to cooperation and assistance under Article X of the Convention and remains committed to facilitating and participating in the exchange of equipment, materials, and scientific and technological information for the use of biological agents and toxins for peaceful purposes. As a result, The Netherlands agreed to support Sri Lanka in the implementation of an NIDP.

II. National Inventory of Dangerous Pathogens (NIDP)

5. States have to take appropriate measures to secure and account for materials that represent biological proliferation risks. Under the BTWC, in particular Article IV, States Parties agreed to implement measures in order to “prohibit and prevent the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipment and means of delivery”. In addition, States are required to “develop and maintain appropriate effective measures to account for and secure [nuclear, chemical, or biological weapons, their

¹ <https://www.un.org/disarmament/biological-weapons/eu-support-to-the-bwc/>

² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019D0097&from=EN>



means of delivery, and related materials] in production, use, storage or transport” in accordance with United Nations Security Council Resolution 1540 (UNSCR 1540)³.

6. However, these instruments provide limited guidance for policymakers on what particular pathogens should be accounted for or how an accountability and regulatory system should or could be set up. The World Health Organisation Joint External Evaluations (WHO JEE)⁴ acknowledge that the lack of accounting systems in many countries is a significant biosecurity gap. In order to address this biosecurity gap and to prevent misuse of dangerous pathogens, governments would first need to gain a comprehensive understanding of which high-risk pathogens and related materials are in fact present within the territory of their state.

7. A critical step towards greater global health security and safe and secure practises in biological laboratories is to implement a national oversight system to address the biological risks and mitigation measures associated with handling and storing dangerous pathogens. A ‘National Inventory of Dangerous Pathogens’ (NIDP) is a feasible, practical, and essential implementation measure in setting up a national oversight and regulatory system.

8. Within the context of biosecurity, a national inventory is a database in which to keep information collected from all institutes that store and maintain dangerous pathogens. In this way, national authorities have access to information on what high-risk pathogens are present in their country and where they are kept.

9. The National Institute of Public Health and the Environment (RIVM) of the Netherlands has developed an electronic database that is available on request, including guidance documents, which allows national authorities to create and manage a national inventory.⁵ RIVM has cooperated with several countries in East Africa in implementing such a national inventory, with the project in Uganda being recognized by the WHO JEE as contributing to the improvement of Uganda’s capacities regarding biosafety and biosecurity.⁶

III. Implementation workshops

10. In May 2022, the first virtual consultation workshop took place between experts from the Netherlands Biosecurity Office⁷ at RIVM and different Sri Lankan experts from the Ministry of Agriculture, the Ministry of the Environment, the Department of Animal Health, Plant quarantine services, Attorney General’s Department, the Ministry of Health, the Ministry of Defense, and academia, among others. During this workshop, the needs of Sri Lanka were presented and the contours of the assistance workshops were defined.^{8,9}

11. The implementation of a NIDP consists of four stages: (1) the identification phase; (2) the preparatory phase; (3) the implementation phase; and (4) the maintenance and evaluation phase.

12. The first two phases were discussed with 16 experts from Sri Lanka during an in-person workshop that was held in Thailand on August 8-10, 2022. During the workshop, a

³ Security Council resolution 1540 [concerning weapons of massive destruction]. S/RES/1540 (2004): UN Security Council. 2004.

⁴ Joint external evaluation (JEE) mission reports. World Health Organization (WHO). Available from: www.who.int/ihr/procedures/missionreports/en/

⁵ Vennis I.M., Bleijs D.A., Brizee S., van den Berg H.J.L., Kampert E., Rutjes S.A., van Passel M.W.J. (2021). “Systematic approach towards establishing a national inventory of dangerous pathogens National Inventory of Dangerous Pathogens.” *Global Health Action*, 14(1).

⁶ Brizee, S. et al. “Establishment of a National Inventory of Dangerous Pathogens in the Republic of Uganda.” *Health security* vol. 17,3 (2019): 169-173. doi:10.1089/hs.2018.0112

⁷ Brizee, S. et al. “Establishment of a National Inventory of Dangerous Pathogens in the Republic of Uganda.” *Health security* vol. 17,3 (2019): 169-173. doi:10.1089/hs.2018.0112

⁸ Joint External Evaluation of IHR Core Capacities of Democratic Socialist Republic of Sri Lanka. Geneva: World Health Organization; 2017. <https://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>

⁹ Documenting progress following the JEE and implementation of the NAPHS in the Republic of Sri Lanka: mission report. Geneva: World Health Organization; 2020 (WHO/WHE/WPE/HSP/2020.4)

National Action Holder was identified that would be responsible for the implementation and hosting of a NIDP. In addition, a communication plan was designed, relevant stakeholders (universities, research institutes etc) were identified, and an initial list of high risk pathogens to be considered was drafted.

13. The third and last workshop that was held on November 17-18, 2022, in Sri Lanka, centred on the final two stages of NIDP implementation. During the workshop, an extensive and interactive risk assessment exercise was carried out regarding the electronic database and data gathering process. Illustrating the importance of implementing an NIDP, the final day of the workshop was attended by representatives of relevant stakeholders and high-level governmental officials.

IV. Conclusion

14. The aim of this collaborative project was to establish a National Inventory of Dangerous Pathogens (NIDP) in Sri Lanka, including training activities to increase awareness among stakeholders on biosecurity and dual-use related risks. A national inventory is supportive in the governance of and accountability for dangerous pathogens in a country. In addition, the data can be used as the basis for establishing appropriate biosecurity assessment and monitoring systems.

15. Within the scope of the BTWC, the bilateral collaboration between Sri Lanka and the Netherlands is a practical example of assistance and cooperation under Article X of the Convention. In addition, the establishment of an NIDP in Sri Lanka contributes to the national implementation of the Convention as required under Article IV.

16. The authors of this working paper suggest that the Ninth Review Conference take note of the value of national implementation measures in its final document so as to encourage States Parties to develop and implement pathogen repository and inventory systems, including by identifying and documenting information in dedicated electronic databases on entities that store or maintain dangerous pathogens.
