

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

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English only

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Reducing Biological Risks by Promoting the Peaceful Use of Biology: Update on activities

Submitted by Norway

I. Introduction

1. In 2021, the Norwegian Ministry of Foreign Affairs provided a voluntary contribution of NOK 3,300,000 to the United Nations Office for Disarmament Affairs (UNODA) to support activities within the framework of Article X of the Biological Weapons Convention (BWC) with the aim of enhancing its implementation. The overall aims are to provide assistance to developing countries and to foster cooperation on issues relating to the implementation of Article X.

II. Aims and structure

2. The objectives are as follows:

- (a) Strengthen implementation of the BWC in developing countries, particularly Article X;
- (b) Support efforts to build capacity and knowledge relating to humanitarian and developmental perspectives on the BWC;
- (c) Strengthen developing countries' expertise and capacity to fulfil their obligations under the BWC and foster South-South cooperation in this regard;
- (d) Support efforts to promote biological safety and security and peaceful use of biological sciences in developing countries; and
- (e) Promote disarmament by strengthening the capacity of relevant international and multilateral organisations, and support efforts in the areas of humanitarian relief and social and economic development.

3. Various activities are to be conducted, divided into four main categories:

- (a) Building human capacities through South-South cooperation: The sub-project focuses on developing human resources within the life sciences in developing countries;
- (b) Support for the BWC Assistance and Cooperation Database: The sub-project focuses on the existing Assistance and Cooperation Database established and maintained by the ISU;
- (c) Article X in the context of the Ninth BWC Review Conference: The sub-project focused on contributing to discussions on Article X before and during the Ninth Review Conference in late 2022;



(d) Support for the translation of a Guide to implementing the BWC for States Parties: The sub-project involved financial support for translation from English into other official UN languages.

4. The activities conducted from December 2021 to November 2023 included organising a ‘Trade and Technology Transfer Webinar’, support for the translation of the ‘Guide to Implementing the BWC’, organising four in-person capacity-building events namely a ‘Conference on Promoting Beneficial Technologies’ in Geneva, Switzerland, a scientific visit and briefings at the Biotech Campus in Geneva, Switzerland, a ‘Workshop on International Cooperation and Assistance under the Biological Weapons Convention’ in Rakitje, Croatia, and a ‘Course on Virus Detection and Biosecurity’ in Trieste, Italy. Furthermore, the ISU participated in an ‘International Conference on COVID-19 Lessons Learned’ which was a regional cooperation event focused on Central Asia and the Caucuses regions. The funds provided by Norway also supported a comprehensive validation and updating process for the assistance offers and requests in the BWC Assistance and Cooperation Database.

5. This working paper informs, in detail, about the progress which has been made in the implementation of the activities and the way forward. Additionally, the working paper presents some conclusions drawn from implementation of the activities to date.

III. Implementation

Building human capacities through South-South cooperation

‘International Conference on COVID-19 Lessons Learned’, 6-7 October 2022, Tbilisi, Georgia

6. From 6 to 7 October 2022, the Biosafety Association of Central Asia and the Caucuses (BACAC) with assistance from the EU CBRN Risk Mitigation Centres of Excellence Initiative and the U.S. International Security and Non-proliferation Office of Cooperative Threat Reduction jointly organised an International Conference on COVID-19 Lessons Learned. The key objective of the Conference was to enhance cooperation and coordination at the regional and international level.

7. The Conference was attended by biosafety and biosecurity experts and officials from Central Asia, the Caucasus and other regions. The BWC Implementation Support Unit (ISU) consultant delivered a presentation on ‘Cooperation and Assistance under Article X of the Biological Weapons Convention’. Participants were informed about the provisions of Article X and the Assistance and Cooperation Database as an operational tool to facilitate its implementation. The conference provided an opportunity to engage with biosafety and biosecurity experts from the region, all of them from OECD’s DAC List of ODA Recipients in 2023, in bilateral meetings and brief them about opportunities available under Article X, as well as about the BWC Assistance and Cooperation Database. During the meetings, views on bottlenecks and challenges for regional and international assistance mechanisms including assistance under Article X, were exchanged.

‘Workshop on International Cooperation and Assistance under the Biological Weapons Convention’, 28 February to 3 March 2023, Rakitje, Croatia

8. From 28 February to 3 March 2023, the ISU, together with RACVIAC - Centre for Security Cooperation, co-organised a workshop on ‘International Cooperation and Assistance under the Biological Weapons Convention’. The workshop took place at the RACVIAC headquarters in Rakitje, Croatia. RACVIAC is an international, independent, regionally focused organization, fostering dialogue and cooperation on security matters in Southeastern Europe.

9. The workshop’s objectives were to provide an overview of the BWC, the outcome of the Ninth Review Conference, as well as a deeper understanding of the Convention’s provisions for international cooperation and assistance under Article X. The workshop was primarily designed for military officials, technical and diplomatic experts dealing with non-proliferation related issues to BWC, public health and BWC National Contact Points (NCPs).

Given that advances in biological sciences and technology are eroding technical barriers to the development and acquisition of biological weapons, it was considered that an in-depth understanding of the BWC and Article X could play an important role in fostering regional cooperation and contribute to an enhanced level of preparedness and resilience among RACVIAC Member States for bio-related incidents, regardless of their origin.

10. The workshop's programme included lectures on the BWC and a multi-dimensional tabletop exercise (TTX) on Article X and an active learning session on the preparation and submission of BWC Confidence-Building Measures (CBMs).

11. The workshop served the promotion of Article X in the region as well as informing participants (health security experts) about existing offers in the Assistance and Cooperation Database.

'Capacity-building Course on Virus Detection and Biosecurity', 14-16 June 2023, Trieste, Italy

12. From 14 to 16 June 2023, the ISU, together with International Centre for Genetic Engineering and Biotechnology (ICGEB), jointly organised a capacity-building course on 'Virus Detection and Biosecurity' in the framework of Article X at the ICGEB's headquarters in Trieste, Italy.

13. The course focused on human viral diseases with a pandemic potential. It included lectures in molecular virology, genomic surveillance, detection of emerging viruses, modern diagnostic technologies including DNA sequencing, antiviral therapy, vaccination as well as biosecurity. Selected participants were mainly mid-career professional experts with backgrounds in microbiology, virology and infectious disease representing national research or academic institutes that deal with infectious disease outbreaks. During the practical sessions in the ICGEB laboratories, participants practiced the application of molecular assay and modern sequencing methods for virus detection through hands-on exercises. The course was further enriched by experts from the ICGEB scientific partners' network in Africa and Eastern Europe who shared their experiences on establishing diagnostic laboratories and implementing sequencing techniques during the COVID-19 pandemic in Cameroon, Czech Republic, Ethiopia, Moldova, Nigeria and Slovenia.

14. The capacity-building event was a purely scientific course for the promotion of biological sciences and technologies under Article X. Twenty-one experts, thirteen of them women, from twenty BWC States Parties participated in the course. The combination of theoretical sessions with hands-on exercises and sharing success stories by some of the ICGEB scientific partners' network contributed to the project's objective in promoting biological safety and security and peaceful use of biological sciences in developing countries.

Support for the BWC Assistance and Cooperation Database

15. At the Ninth BWC Review Conference in 2022, many States Parties recalled the importance of the full implementation of Article X, including the validation and enhancement of the functionality of the Assistance and Cooperation Database as an operational tool in the implementation of Article X. During the Review Conference, the ISU thus reached out to a group of States Parties with assistance offers and requests in the Database to seek their views on the methods to enhance the functionality of Database.

16. *Assistance Offers:* following the meetings during the Review Conference, the ISU initiated a process to contact the ten States Parties which had submitted assistance offers to the Database since 2012. The process aimed to assess and evaluate the contents and validity of assistance offers. The States Parties were encouraged to confirm the validity of their offers or to provide a new offer. The process required that revalidated and new offers both contain a set of minimum information (i.e., description and scope of offer, validity period, funding, geographical scope of interest, description, multiple points of contacts from the offering, etc.). By 30 November 2023, the ISU has received 29 new or updated assistance offers from 11 States Parties which are now registered in the Database. This includes two States Parties

which have submitted assistance offers for the first time since the establishment of the Database in 2012.

17. *Assistance Requests:* In September 2023, the ISU started the validation exercise for assistance requests which still continues. Thus far, there are 18 new or updated assistance requests by eight States Parties recorded in the Database. The exercise will continue to address all old requests and update them and make them consistent with minimum required information (i.e., description and scope of request, objectives, sustainability aspects, regional and international coordination issues, and required funding). The validation process is expected to be completed by early 2024.

18. The ongoing validation process will lead to a pool of verified and updated offers and requests which will facilitate the matchmaking process between requesting and offering BWC States Parties. The process continues to serve strengthening the implementation of the BWC in developing countries, particularly Article X and support efforts to build capacity and knowledge relating to humanitarian and developmental perspectives on the BWC.

Article X in the context of the Ninth BWC Review Conference

‘Trade and Technology Transfer Webinar’, 9-10 December 2021

19. The Trade and Technology Transfer Webinar on 9 and 10 December 2021 served as a kick-off event for the project. The original plan of having an in-person conference on the margins of the 2021 Meeting of States Parties was adapted to a virtual event due to restrictions imposed by the COVID-19 pandemic. The webinar aimed at raising awareness and providing an opportunity for discussions on ways for enhancing the implementation of Article X in context of the Ninth BWC Review Conference in 2022.

20. The Chairperson of the 2020 Meeting of Experts on International Cooperation and Assistance and representatives from the United Nations Institute for Disarmament Research (UNIDIR), International Centre for Genetic Engineering and Biotechnology (ICGEB), The World Academy of Sciences (TWAS), and the United Nations Department of Economic and Social Affairs (UNDESA) delivered presentations and briefings to the audience over two days. The presentations focused on capacity-building programmes and initiatives designed to promote trade and technology transfer in the biological science context among developing countries. The initiatives’ contribution to the 2030 Agenda and the Sustainable Development Goals (SDGs), as well as introducing options for strengthening the implementation of Article X were also among the topics that were addressed. The webinar stimulated discussions on topics relevant to Article X, particularly those which had been discussed during the 2018, 2019 and 2020 Meetings of Experts on International Cooperation and Assistance. Furthermore, it provided an opportunity for exploring concrete ideas in enhancement of Article X implementation process in the Review Conference.

‘Conference on Promoting Beneficial Technologies’, 29-30 November 2022, Geneva, Switzerland

21. From 29 to 30 November 2022, the conference on ‘Promoting Beneficial Technologies’, was held on the margins of the Ninth Review Conference. The conference aimed to promote and highlight the peaceful uses of biology and introduced some of the international cooperation mechanisms relevant to Article X. The conference was primarily organised for delegates and experts from developing BWC States Parties while representatives from other BWC States Parties attending the Review Conference also participated and enriched the interactive discussions.

22. During the conference, experts from developing States Parties were informed about international cooperation and assistance mechanisms and related opportunities offered by international and intergovernmental organisations as well as educational institutes. The conference also assisted experts from developing States Parties to gain further insights into Article X, its provisions and its relevance and importance in the context of the Review Conference. Furthermore, the conference contributed to fostering a dialogue among the developing and developed States Parties about Article X implementation.

23. Over the two sessions of the conference, participants were informed about infectious disease surveillance, electronic disease surveillance systems, international assistance and beneficial technologies in animal health, technology transfer and sustainable development in the least developed countries and partnership opportunities with scientific intergovernmental and international organisations. Conference participants gained a better insight about the peaceful uses of biology and the tremendous advances over the recent years which had significantly reduced biological risks. The conference was a scientific forum for experts from developing countries to learn about the latest technological methods in disease surveillance and international cooperation mechanisms. Representatives from the [Institute of Global Health of the University of Geneva](#), [Food and Agriculture Organization of the United Nations](#), [International Centre for Genetic Engineering and Biotechnology \(ICGEB\)](#) and the [United Nations Technology Bank for Least Developed Countries](#) addressed the conference.

‘Visit to the Geneva Biotech Campus’, 1 December 2022, Geneva, Switzerland

24. The visit and scientific briefing at the Biotech Campus in Geneva aimed to promote and highlight the peaceful uses of biology and help experts from developing States Parties to gain a deeper understanding of recent scientific advances in biological sciences relevant to the purpose and objectives of Article X.

25. The visit was built on the presence of sponsored scientists from developing countries who were participating in the Review Conference. It involved visits and briefings at the [Institute of Global Health of the University of Geneva](#) and the [Health 2030 Genome Centre](#) at the Biotech Campus of Geneva.

26. The scientific visit from the Institute of Global Health of the University of Geneva in the morning session included lectures on advanced mathematical modelling of diseases outbreaks, global research and analytical methods for public health networks, analysis and interpretation of epidemiological data and text mining of scientific literature. The afternoon session at the Health 2030 Genome Centre comprised briefing on the Health 2030 Genome project (genomic sequencing) and the application of genomic surveillance methods during the COVID-19 pandemic in Switzerland. The participants also visited the DNA sequencing laboratories at the Health 2030 Genome Centre where they were briefed on DNA sequencing techniques.

Support for the translation of a Guide to Implementing the Biological Weapons Convention

27. In addition to the capacity-building events and updating process of the BWC Assistance and Cooperation Database, the translation of the Guide to Implementing the Biological Weapons Convention into all six official UN languages, as one of the project’s objectives, has been completed which will assist developing States Parties to prepare and adopt BWC implementing legislation and secondary regulations.

IV. Conclusions and the way ahead

28. The activities conducted have served, thus far, as an effective approach for further introducing and enhancing Article X implementation by revalidating the Assistance and Cooperation Database. Furthermore, they have served as capacity-building tools for scientists and members of health security platforms to promote the use of biological science and technologies for peaceful purposes. The objectives have been followed through a spectrum of activities, including organising a purely scientific course to introduce advances in biological science, organising courses for the promotion of Article X, the ongoing revalidation of the BWC Assistance and Cooperation Database, strengthening collaboration and cooperation with relevant international and regional organizations, as well as feeding lessons and suggestions into the discussions at the Ninth Review Conference.

29. A total of three in-person activities – two international capacity-building events and a regional workshop in Southeastern Europe – were carried out between December 2021 and November 2023. Fifty-five technical experts, twenty-five of them women (45%), from thirty

BWC States Parties participated in these events. Furthermore, a large number of delegates and technical experts from developing and developed States Parties participated in the conference on ‘Promoting Beneficial Technologies’, as a capacity-building event, on the margins of the Ninth Review Conference. Six academic institutions and intergovernmental organisations contributed to these events. The activities, thus far, have reached a diverse pool of technical experts and stakeholders – including the public health, animal health, biologists and the security and diplomatic communities.

30. Discussions with participants at the events carried out have indicated a certain disconnect between the scientific/technical and the diplomatic/policy making communities in relation to operationalizing Article X, most notably the provision of assistance offers and submission of assistance requests. While scientific/technical experts assess cooperation opportunities merely with respect to potential technical merits and benefits resulting from the cooperation, diplomats and policymakers consider them from a wider, policy perspective. In turn, this has led to different expectations among these stakeholder groups concerning engagement in Article X related activities. In order to ensure a concerted approach at the national level, awareness-raising seminars could be held that inform about the various requisite considerations and steps to be taken when preparing/submitting Article X requests.

31. Implementation of the project has highlighted the important role of BWC National Contact Points (NCPs) in the process of international cooperation and assistance. They have a crucial part in facilitating active participation in Article X related opportunities (i.e., capacity building courses), pursuing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes under Article X, as well as preparing assistance requests or offers. Further efforts should be invested in informing NCPs about their role and function and promoting assistance and cooperation opportunities under Article X.

32. The Project has also highlighted the importance of cooperation and assistance at the bilateral and regional level and noted the need for continued efforts in this area. Discussions which took place on the margins of the activities also underlined the potential synergies between Article X and Article VII where effective implementation of Article X could boost States Parties’ capacities for national preparedness and response. The conference on the “Promotion of Beneficial Technologies” in November 2022 helped to inform participants about capacities and cooperation and assistance opportunities with relevant international organisations and educational institutes such as the Food and Agriculture Organization of the United Nations, International Centre for Genetic Engineering and Biotechnology (ICGEB), the United Nations Technology Bank for Least Developed Countries and the Institute of Global Health of the University of Geneva. The impact of the project will continue to be strengthened by engaging with relevant international organisations and educational institutes. This should encourage developing States Parties to join Article X activities more actively.

33. Planning has been initiated for the organisation of a second training course on ‘Virus Detection’ in March 2024. The second course, building on lessons learnt from the first event, and feedback provided by participants and instructors, will be focused on the application of different techniques in identification of viruses with a pandemic potential. The course will be also combined with a short workshop on science diplomacy, to be organised in cooperation with [The World Academy of Sciences](#) in Trieste, Italy for the same participants.

34. The Government of Norway expresses its appreciation to the educational and intergovernmental organisations for their support or hosting of the capacity-building events. The activities continue to strengthen the implementation of Article X and promote the uses of biological science and technologies for peaceful purposes.
