

# **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**

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English only

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Geneva, 28 November to 16 December 2022

Item 11 of the 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**

## **Support of the European Union and its Member States to Strengthening Biosafety and Biosecurity Globally**

**Submitted by the European Union**

### **I. Introduction**

1. The Biological and Toxin Weapons Convention (BTWC), as a strong legally binding global norm, is the cornerstone of international efforts to prevent biological agents or toxins from ever being developed, produced, stockpiled or otherwise acquired and used as weapons. The BTWC has evolved to be relevant to meet today's needs but it must evolve further to address current challenges.

2. Developments in science and technology are important for the BTWC, as they can affect its implementation and have implications for the threats posed by biological weapons. Biological agents and toxins are widely used in research for peaceful purposes in line with the provisions of the BTWC. Advances in life sciences are inextricably linked to improvements in human, plant and animal health, and thus to the development of societies, nations and states. Together with an ever-faster transmission of knowledge, they are beneficial in finding new ways to fight disease. Nonetheless, as they also bring about risks, the international cooperation for supporting safe and secure research in life sciences, as well as the sharing of related technologies, as promoted by Article X of the BTWC, should be accompanied by efforts strengthening biosafety and biosecurity at international, regional, and national levels. Moreover, the risk that terrorists gain access to dangerous pathogens remains real and must be taken into account when developing measures to mitigate biological risks.

3. The COVID-19 pandemic has showed us how quickly diseases can cross borders. It demonstrated the devastating global disruption to which they can lead, regardless of the origin of such dangerous pathogens. The pandemic highlighted the lack of preparedness at national, regional, and international levels to respond to newly emerging pathogens. The lessons learnt from this pandemic have further underlined the need to step up efforts to improve biosafety and biosecurity globally.

4. In the context of the Biological and Toxin Weapons Convention (BTWC):

(a) "biosafety" refers to principles, technologies, practices and measures implemented to prevent the accidental release of, or unintentional exposure to, biological agents and toxins, while

(b) "biosecurity" refers to the protection, control, and accountability measures implemented to prevent the loss, theft, misuse, diversion or intentional release of biological



agents and toxins and related resources as well as unauthorized access to, retention or transfer of such material.<sup>1</sup>

5. Recognising that biosafety and biosecurity measures contribute to preventing the development, acquisition or use of biological and toxin weapons and are an appropriate means of implementing the Convention, States Parties to the BTWC agreed in 2008, *inter alia*, on the value of international cooperation on biosafety and biosecurity at the bilateral, regional and international levels.<sup>2</sup>

6. The European Union (EU) and its Member States are staunch supporters of the BTWC and are actively engaged in international efforts to strengthen biosafety and biosecurity around the world.

7. This EU Working Paper presents a selection of key projects and initiatives undertaken by the European Union and its Member States in this regard since the Eighth BTWC Review Conference in 2016.

## **II. Support by the EU**

8. The EU Strategy against the proliferation of Weapons of Mass Destruction of 2003 identified the increasing threat emanating from biological weapons. In line with the Strategy, the EU has provided strong political support and since 2006 committed significant funds from the EU budget to projects in support of strengthening biosafety and biosecurity in third countries.

9. EU's financial support has notably focused on:

- (a) funding projects of the Implementation Support Unit of the BTWC;
- (b) funding projects of international and regional organisations to assist UN Member States in their implementation of UN Security Council Resolution 1540 (2004) on the non-proliferation of weapons of mass destruction and their means of delivery;
- (c) funding UNODA projects to strengthen and operationalise the UN Secretary General's Mechanism for the Investigation of Alleged Use of Chemical and Biological Weapons, specifically insofar as biological weapons are concerned;
- (d) funding the activities of the EU CBRN Centres of Excellence Initiative;
- (e) funding projects by the World Health Organisation.

## **III. EU funding to projects by the Implementation Support Unit of the BTWC**

10. In the context of the implementation of Council Decision (CFSP) 2016/51 of 18 January 2016 in support of the BTWC, the EU provided EUR 2.3 million over three years in support of promoting universal adherence to the BTWC and promotion of the implementation of the BTWC. It supported activities aimed at enhancing interaction with non-governmental stakeholders on science and technology and biosafety and biosecurity. It furthermore supported developing national capacities for BTWC implementation, in particular in developing countries and in areas such as Articles VII and X, and supporting the intersessional programme and the preparations for the Eighth Review Conference and enabling tools for awareness-raising, education and engagement. The implementation continued until January 2019.

11. The follow-on Decision (CFSP) 2019/97 in support of the BTWC, adopted on 21 January 2019, provided EUR 3 million for support to BTWC implementation. This included

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<sup>1</sup> See Report of 2008 BWC MSP; see para 20 <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G09/600/07/PDF/G0960007.pdf?OpenElement>

<sup>2</sup> See Report of 2008 BWC MSP; see para 21 <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G09/600/07/PDF/G0960007.pdf?OpenElement>

activities in support of capacity building to strengthen BTWC national implementation, fostering biosecurity networks in the Global South, supporting the inter-sessional programme and preparations for the Ninth Review Conference of the BTWC and strengthening the preparedness of States Parties to prevent and respond to attacks involving biological agents and enabling tools for outreach, education and engagement.

12. On 25 November 2021, the EU adopted Council Decision (CFSP) 2021/2071 providing additional EUR 2 million in support of:

- (a) an ISU project developed in the context of the Biosafety and Biosecurity in Africa Signature Initiative to strengthening biosafety and biosecurity capabilities in Africa through increased regional coordination;
- (b) capacity building for BTWC National Contact Points;
- (c) facilitating the review of developments in science and technology of relevance to the BTWC by also involving academia and industry and broadening the support for voluntary transparency exercises.

#### **IV. EU support related to the Implementation of UNSC Resolution 1540 (2004)**

13. Council decision (CFSP) 2017/809 of 11 May 2017 in support of the implementation of United Nations Security Council Resolution 1540 (2004) on the non-proliferation of weapons of mass destruction and their means of delivery provides for EUR 2.6 million to UNODA project to organise sub-regional workshops, country visits, meetings, events, training and public relations efforts. The aim of the projects is:

- (a) enhancing relevant national and regional efforts and capabilities;
- (b) contributing to the practical implementation of specific recommendations of both the 2009 comprehensive review on the status of implementation of UNSCR 1540 (2004) and the outcome of the comprehensive review conducted during 2016;
- (c) supporting the development of voluntary UNSCR 1540 (2004) national implementation action plans upon States' request and promoting the engagement of relevant stakeholders from industry and civil society in the implementation of UNSCR 1540 (2004).

14. The following biosafety and biosecurity activities have been supported under this Decision so far:

- (a) national Seminar on Biological Safety and Security (Tashkent, Uzbekistan, 22-23 October 2018);
- (b) national Workshop on Strategic Trade Controls Enforcement, including workshop sessions (modules) on biological materials (Dushanbe, Tajikistan, 7-9 May 2019);
- (c) translation of the draft Law of the Kyrgyz Republic on Biosafety and Biosecurity, and its submission to the BTWC ISU for expert review (2021);
- (d) supporting participation of state authorities (members of the national interagency working group involved in implementation of UNSCR 1540) in the preparatory expert meeting for the PRE in support of the BTWC (Geneva, Switzerland, 12-14 October 2021);
- (e) participation of experts from UNODA Regional Coordinator for Asia and UNRCPD in the Peer Review Exercise (PRE) in the Kyrgyz Republic under EU Council Decision 2019/97 in support of the Biological Weapons Convention (BWC) (Issyk-Kyl, Kyrgyzstan, 16-18 August 2022);
- (f) provision of technical assistance to Ministry of Health, Ministry of Economy and Commerce and Ministry of Defence (members of the national interagency working group involved in the implementation of UNSCR 1540);

(g) support to the organisation by UNODA of Regional Women's Conference on Preventing the Proliferation of Weapons of Mass Destruction to non-State Actors (Addis Ababa, Ethiopia, 12-13 October 2022);

(h) peer-review meeting on implementation of the United Nations Security Resolution 1540 (2004) (Istanbul, Türkiye, 8-10 November, 2022).

15. Council Decision (CFSP) 2019/1296 of 31 July 2019 in support of strengthening biological safety and security in Ukraine in line with the implementation of United Nations Security Council Resolution 1540 (2004) on non-proliferation of weapons of mass destruction and their means of delivery provides EUR 1.9 million for a project of the Organization for Security and Co-operation in Europe to:

(a) harmonize existing Ukrainian regulations on biosafety and biosecurity with international standards;

(b) establish veterinary surveillance system sustainability in Ukraine for diseases related to especially dangerous pathogens ('EDP-related diseases');

(c) organise awareness-raising, education and training for life scientists on biosafety and biosecurity.

16. Council Decision (CFSP) 2019/2108 of 9 December 2019 in support of strengthening biological safety and security in Latin America in line with the implementation of United Nations Security Council Resolution 1540 (2004) on non-proliferation of weapons of mass destruction and their means of delivery provides EUR 2.7 million in support of the efforts by the Organization of American States/Inter-American Committee against Terrorism (OAS/CICTE) to provide the beneficiary countries with technical and legislative assistance to:

(a) strengthen regulations on biosafety and biosecurity;

(b) ensure harmonization of such regulations with international standards;

(c) promote and enhance regional cooperation and to organise awareness raising, education and training on biosafety and biosecurity.

## **V. EU Support to the UN Secretary-General's Mechanism for the Investigation of alleged use of Chemical and Biological Weapons (UNSGM)**

17. Council Decision (CFSP) 2020/732 of 2 June 2020 in support of the UN Secretary-General's Mechanism for investigation of alleged use of chemical and biological or toxin weapons provides EUR 1.4 million in support of the United Nations Office for Disarmament Affairs (UNODA) activities for:

(a) training of experts on the UNSGM roster, capacity-building of laboratories from developing countries;

(b) outreach activities to ensure the nomination to the UNSGM roster of experts and laboratories from the Global South;

(c) it also provided funding for organising a full field exercise and for regular coordination activities or workshops or both with relevant organisational partners (so called Capstone Exercise organised in September 2022).

## **VI. EU CBRN Centres of Excellence**

18. The EU launched the CBRN Centres of Excellence (CoEs) Initiative in 2020. This programme aims at enhancing the institutional capacity of partner countries to mitigate CBRN risks regardless of their origin. More than 90 projects have been funded in total, with one third of them addressing biological issues amounting in overall to EUR 85 million.

19. During the period 2017-2021, under the Instrument contributing to Stability and Peace (IcSP), a second and third cohort of fellows were trained under the Mediterranean Programme for Intervention Epidemiology Training (MediPIET) in order to better address the spread of communicable diseases in countries surrounding the Mediterranean and the Black Sea. By the end of 2018, Georgia, Armenia, Ukraine, and Palestine have become MediPIET training sites.

20. To help partner countries meet their obligations under the International Health Regulations, another EUR 2.5 million project (STRONGLAB) aimed to strengthen public health laboratories and minimise potential biological risks. This project, implemented by WHO, specifically targeted risks increased by environmental and climate change. It aimed to strengthen specimen transport systems, implement correct laboratory biosafety & biosecurity regimes, and ensure that quality laboratory diagnostic capacity exists for priority diseases. These activities have been implemented in Sahel and Central Asia countries.

21. To increase the prevention and control of cross-border health threats in the Southern neighbourhood, a second phase of MEDILABSECURE consolidated the networks of human and animal virology laboratories and of medical entomology (EUR 5.5 million) in 19 countries in the Mediterranean and the Black Sea region and five Sahel countries. The objectives are to prevent the spread of viruses and insects (mosquitoes, ticks) that act as vectors, and to prevent and control outbreaks of zoonotic viruses known to pose a risk in these regions (West Nile, Corona virus, Influenza viruses, Crimea Congo Haemorrhagic fever virus, etc.). This includes the prevention of spread of viruses that may become a risk for these regions (Dengue, Chikungunya, Yellow Fever, Rift Valley Fever, etc.). This network has been very useful in supporting countries to diagnose correctly COVID-19 at the start of the pandemics.

22. In the Middle East, medical preparedness and emergency medical response to CBRN incidents have been enhanced through the provision of specialized/advanced courses on urgent medical assistance during CBRN events/disasters. This includes the development of training materials and curricula on disaster medicine/medical management of such incidents. In addition, the technical capabilities of national hospital teams have been strengthened thanks to practical exercises, the development of guidelines, standard operating procedures, contingency and plans for medical management during a CBRN incident (EUR 3 million).

23. In South Caucasus and Central Asia, biosafety and security capabilities have been enhanced by strengthening the national legislative framework to respond to international conventions, and by providing trainings on specific biosafety and security needs with a train of trainer's sustainable approach. Biosafety equipment and supplies were provided to partner countries for a value of EUR 1 million as well as two mobile laboratories for Uzbekistan with ad hoc training and field exercises. In a second phase, close to EUR 1 million of COVID-19 related supplies and equipment were provided to Central Asia and to South East and Eastern partner countries together with 1700 specialists trained (medical, laboratory, border guards, etc.). In total, this action amounted EUR 8.5 million.

24. In Central and Eastern Africa, EUR 4 million were spent on raising awareness and understanding the risks of falsified medicines and developing safety and security measures against falsified medicines in the region. Comprehensive legislations and regulations criminalising the production, storage, transportation, and sale of falsified medicines and medicinal products have been promoted. Technical capabilities to address this challenge were strengthened as well as interagency cooperation and international cooperation.

25. A project worth EUR 10 million was launched for Africa at the start of the COVID-19 pandemics to reinforce preparedness and response to COVID-19 in Africa, and to implement an innovative approach to address unmet needs of diagnostics and health services thanks to mobile platforms. The mobile labs can deliver laboratory and health services in the remote areas of Africa to detect, respond, control, and prevent epidemics. Under this project, new advanced diagnostics capacities, as well as increased training capabilities of Institute Pasteur de Dakar (IPD), have been supported in order to act as a regional centre of excellence for the detection of outbreaks in Africa.

26. "BIOSEC" (EUR 3.8 million) was implemented in South East Asia. Under this project, a set of recommendations for improving biosecurity management systems was

provided. Awareness on biosecurity and biosecurity risk management, crosscutting biological risks (zoonosis/pests) and dual-use high-risk biological materials was increased among the various stakeholders. National legislations and guidelines were revised in compliance with relevant international obligations in the area of biosecurity. Enforcement of biosecurity legislation with national and local guidelines, particularly border control monitoring, was enhanced with capacity building workshops, training of trainers and table-top exercises. Laboratory capacity for microbial forensics was improved. Recommendations for the establishment of national inventories of high-risk biological materials, dual-use research and technologies as well as for a security framework for facilities, information and information exchange were delivered.

27. EU CBRN Centres of Excellence has furthermore provided support to the WHO to implement the following:

**A. StrongLabs with EUR 2.5 million for 2019-2022**

- (a) strengthening specimen referral transport systems in North Africa and Sahel countries;
- (b) implementing laboratory biosafety & biosecurity regimes in Central Asia and Sahel countries;
- (c) assuring that quality laboratory diagnostic capacity exists for priority diseases (Central Asia mainly).

**B. StrongLabs 2.0 with EUR 1.2 million for 2022-2024**

To establish and assess a laboratory recognition programme for national reference laboratories that test for pathogens of high public health importance with the aim of ensuring better quality diagnostics with earlier detection in a higher number of countries and improve health security globally.

28. Launched in 2017, the five-year EBO-SURSY project is funded by the European Union and implemented by the World Organisation for Animal Health (OIE/WOAH) in partnership with Le Centre de Cooperation Internationale en Recherche Agronomique pour le Développement (CIRAD), the French National Research Institute for Sustainable Development (IRD) and Institut Pasteur and aims to strengthen early detection systems for wildlife in West and Central Africa to prevent outbreaks of Ebola virus disease (EVD) and four other viral haemorrhagic fevers: Marburg virus disease, Rift Valley Fever, Crimean-Congo haemorrhagic fever, and Lassa fever. The global funding of this programme for preventing the emergence of zoonotic diseases is 10 million EUR.

29. In addition to the above projects and activities funded by the EU budget, EU Member States are strongly engaged in projects to support strengthening of biosafety and biosecurity in different parts of the world. Below is a selection of such activities, divided into groups by the area of focus.

## **VII. Training and awareness-raising**

30. The Royal High Institute for Defence (RHID), the think tank of the Belgian Ministry of Defence (MoD) in the field of security and defence, manages a long-term program of Scientific and Technological Research for Defence (called RSTD program). During the period of 2018-2022, the MoD financed i.a. the project Development of innovative methods for ultra-fast amplification and specific detection of high pathogenic bio-agents (CBRN) on Operation Theatre. The project aims to rapidly identify highly pathogenic biological agents in a field setting. Lyophilized reagents will be tested and validated for use under field conditions in the B-LiFE laboratory.

31. For many years, the Belgian Institute for Tropical Medicine in Antwerp (ITM) has been providing scholarship programmes for health professionals from the South, for training

at advanced master level and for experts in specific fields of science through short courses. The majority of participating students benefit from scholarships financed by Belgian Development Cooperation. For this purpose EUR 17,6 Mio were available for the period 2017-2021. The ITM also receives core funding from several governmental entities. The ITM currently offers three Master tracks, two postgraduate tracks and several specialised short courses covering the fields of tropical clinical sciences, public health (health systems policy & management and disease control) and tropical animal health. All Masters and short courses included in the scholarship programme are accredited through international bodies. Belgian Development Cooperation will extend the program through 2022-2026 for a total of EUR 16Mio.

32. The Belgian Development Cooperation helps the Institute for Tropical Medicine in Antwerp (ITM) to cooperate with and support similar institutions in the South in order to mutually reinforce capacities and accomplish their respective scientific and societal missions in the fields of tropical medicine for humans and animals, disease control and health services management. The ITM has been cooperating with and supporting numerous institutions in Latin-America, Africa and Asia. Moreover, Belgium has contributed EUR 290 000 to the IAEA's Zoonotic Disease Integrated Action (ZODIAC) initiative. This initiative was established in June 2020 to help countries prevent pandemics caused by bacteria, parasites, fungi or viruses that originate in animals and can be transmitted to humans. Using a systematic and integrated approach, ZODIAC will strengthen the preparedness and capabilities of Member States to rapidly detect and timely respond to outbreaks of such diseases.

33. The Danish Centre for Biosecurity and Bio-preparedness (CBB) has participated in training of government officials in Jordan and Georgia. Recently the CBB contributed to a high-level conference on engaging public representatives, initiated by the Governments of Canada and the United Kingdom, and representatives of the Government of South Africa. The CBB currently participates in the Visibility Initiative for Responsible Science (VIRS) project. VIRS is focusing on creating transparency around biological risk assessment and risk management strategies across the life science research cycle, with special attention to dual-use research. CBB is a case study participant and offers a governance perspective to the project.

34. With funding from the Danish Peace and Stabilisation Fund, and building on Danish biosecurity expertise, the CBB has been implementing a programme contributing to the establishment of biosecurity and bio-preparedness systems in selected countries in East Africa, the so-called Danish Biosecurity Partnership Programme. The purpose of the programme was to build legal frameworks and capacities to mitigate biological risks, as well as to raise awareness among university students and researchers in life sciences. It contributed to public health and responsible biological technology development, and, longer term trade, investment and social-economic development in partner countries. As a direct product of the work programme, two publications were issued in order to make the Danish biosecurity and bio-preparedness experience available to the international audience. These publications "An efficient and practical approach to biosecurity" and "An introduction to bio-preparedness" are freely available online.

35. Germany has been focusing on biological security during its 2022 Presidency of the G7-led Global Partnership against the Spread of Weapons and Materials of Mass Destruction. In 2022, Germany has been co-chairing the Biological Security Working Group (with Canada) and two sub-working groups (with Nigeria and South Africa) of the Signature Initiative to Mitigate Biological Threats in Africa.

36. In October 2022, Germany organised a Global Partnership Conference on Current Biosecurity Challenges, where stakeholders discussed high-risk research, the possible use of high-consequence pathogens as a weapon, cyber-biosecurity, and disinformation as well as risk reduction measures. In November, the Biological Security Working Group organised a virtual meeting on Kazakhstan's proposal to establish International Agency for Biosafety (IABS).

37. The biennial Medical Biodefense Conference organised by the German Bundeswehr Institute of Microbiology has developed into one of the world's leading conferences on

surveillance, risk assessment, disease prevention, detection technologies, reconnaissance and bio-forensics, diagnostics, medical countermeasures, therapy, and outbreak investigation and management. It brings together leading experts from governments, military research institutions, and universities. The 17th Conference took place in September/October 2021 in Munich and focused on global challenges posed by new infectious diseases and on potential risks related to rapid developments in the life sciences and biotechnology.

38. The Netherlands contributes to the implementation of EU Council Decision 2019/97 in support of the BTWC by assisting selected BTWC States Parties through so-called “National Preparedness Programmes” (NPP) aimed at preventing and responding to attacks involving biological agents. The Netherlands responded to an assistance request from Sri Lanka, received through the BTWC’s Implementation Support Unit (ISU) and supports to the establishment of 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 first online workshop was organized in May 2022. An in-person training was consequently held in Thailand to raise awareness among national stakeholders. A third and last workshop is scheduled for November 17-18, 2022, in Sri Lanka.

39. Furthermore, the Netherlands is closely involved in a three-year project funded by the EU in the context of support for the EU Chemical, Biological, Radiological and Nuclear (CBRN) Centres of Excellence (CoE). The overall objective of the project is enhancing biosecurity in South-East Asia. The project is executed in partnership with regional and local experts in Brunei, Cambodia, Indonesia, Lao PDR, Philippines, Singapore, Thailand, and Vietnam. The purpose of this project is to, first, share a set of recommendations for improving biosecurity management systems in South-East Asia addressing biosecurity awareness, legislation and guidelines, customs and law enforcement, high-risk biological materials and facilities, microbial forensics, physical and information security framework for facilities (considering emerging technologies), and information exchange. Second, the project will provide effective tools to enhance capabilities to respond to highly communicable diseases or global catastrophic biological events, such as pandemics. In line with the second goal, the project has been extended in response to the COVID-19 pandemic to support partner countries with health emergency management capabilities in collaboration with regional experts.

40. The Netherlands is also involved in an EU CBRN CoE project that was launched in March 2019 to support partner countries in the Middle East region (specifically, Iraq, Jordan and Lebanon). The project’s objective is to achieve enhanced CBRN protection of physical and virtual critical civil infrastructure. In response to the COVID-19 pandemic, the project has been extended with a COVID-19 support program.

41. The Netherlands is focused on mitigating the risks inherent to dual-use research, namely that that well-intended research is used for harmful purposes. In this regard, the Netherlands Biosecurity Office at RIVM presented the [Dual-Use Quicksan](#) at the BTWC Meeting of Experts in 2021. This web-based tool presents researchers that work with microorganisms with a set of questions to assess the dual-use risks of their research. The results of the Dual-Use Quicksan provide researchers with an indication of the dual-use potential of their research. These findings can, among others, guide researchers in discussions with a Biorisk Management Advisor in their respective organizations. The Dual-Use Quicksan can be embedded in a broader biosafety and biosecurity system that includes dual-use monitoring and awareness within organizations. The practical application of this tool has been recognized by WHO in the recently published “Global guidance framework for the responsible use of the life sciences.”

42. In June 2019, Romania and the Implementation Support Unit co-organized a thematic workshop on “The benefits and misuse of biotechnology in the context of Agenda 2030”, focused on fostering endeavours in countering biological threats, promoting the benefits of biotechnology, secure non-proliferation of biological agents and avoid their misuse. Romania has organized several training activities, workshops and expert visits for Georgia, Republic of Moldova and Ukraine.

43. Spain has introduced several workshops through the joint elaboration of useful documents (such as a Biosafety and Biosecurity Questionnaire for human, animal and plants

facilities, including animal and green houses. Madrid 2016. The resulting questionnaire was submitted to the 2016 BTWC Experts Meeting (BWC/MSP/2016/MX/WP.6). Special attention is paid to the cooperation with Chile in these matters, through different workshops organized since 2014. In July 2016, the Chilean National Authority for Chemical and Biological Weapons hosted a bilateral meeting with Spain, specifically designed to raise awareness among Chilean organizations and institutions involved in matters related to Biosecurity. In September 2016, experts from Chile, Colombia, Ecuador, Mexico and Spain worked together in Madrid to openly analyse the situation regarding Biosecurity in each country and facilitate the implementation of various Biosecurity measures at the national level, which final goal would be the development of a National Biosecurity and/or Chemical Security Plan and a National Commission for Biosafety.

44. In order to support the critical work of the Organization for the Prohibition of Chemical Weapons, the Organization for Security and Cooperation in Europe, the Comprehensive Test-Ban Treaty Organization, and the International Atomic Energy Agency, and to strengthen the implementation of the Biological and Toxin Weapons Convention, the Spanish Army has been performing several activities in the different fields described below:

(a) Regarding education and training, the Spanish Army has been performing the following activities on a yearly basis since 2016:

- i. providing two seats for foreign students in the CBRN Military Defence School, in order to attend the course “CBRN Risks”. Spanish-speaking military personnel from the American continent usually fill these places;
- ii. helping to fulfil the curriculum of medicine, nursing and veterinary science students in collaboration with the Catholic University of Valencia. The future healthcare professionals receive formation in the use of biological protection kits and practices of decontamination;
- iii. attendance, by several military personnel, to several courses in the University of Valencia regarding handling, conservation and identification of microorganisms in the years 2016, 2018, and 2019.

(b) Regarding investigation and collaboration with civilian entities, the Army has contributed in the experimentation of different new techniques of decontamination of sensitive materials during the years 2019 and 2020:

- i. since 2018, there are several tasks running in order to upgrade the capabilities of the Army’s water analysis and drug test facilities to become screening laboratories in the fields of toxicology and environmental health;
- ii. in the field of support to civilian authorities, the Spanish Army developed specific procedures and procured isolation kits to allow the medical air evacuation of infected personnel during the 2017 Ebola Virus Disease crisis. Also, during the pandemic caused by the SARS CoV-2 virus, the Spanish Army performed tasks of biological decontamination and cadaver transport in support of civilian authorities;
- iii. finally in the frame of military training support missions in Senegal, during the years 2017, 2018, 2019, and 2022, the Spanish Army contributed to advise the national Armed Forces in the implementation of control measures against the spreading of Ebola Virus Disease (EVD) and other biological hazards, and providing specific training in the NBC field.

45. The Spanish Instituto De Salud Carlos III (ISCIII) is the main Public Research Entity funding, managing and carrying out biomedical research in Spain. The ISCIII collaborates and provides technical advice on the design of internationalisation policies and strategies for Spanish research in health sciences and on establishing partnerships, in coordination with the Ministry of Science and Innovation. It is responsible for national and international representation, coordination and cooperation in many international fora related to biological research and health sciences. The ISCIII is committed to implementing projects to support

biosafety and biosecurity globally by strengthening the preparedness against serious cross-border threats to health.

46. Among these projects, specifically following should be noted:

(a) SHARP JA partners work collaboratively to identify and address gaps in the capacity to prevent, detect and respond to biological, chemical, and environmental threats to human health in laboratories of EU member states;

(b) The Joint Action TERROR, Strengthen Health Preparedness and Response to Biological and Chemical Terror Attacks (2021 – 2023) involves partners from 18 countries and 34 affiliated entities in Europe. JA TERROR's main objectives are to address gaps in health preparedness and to strengthen the response to biological and chemical terror attacks through cross-sectoral work with the security, civil protection and health sectors. An effective response requires preparedness in terms of coordination between the health, law enforcement and civil protection sectors; clear command and control mechanisms regularly tested; and the capacity to rapidly mobilize health workers, healthcare providers, emergency responders, law enforcement and security services. Considering the known challenges to cross-sectoral work, it is a clear objective for the Joint Action to deliver mapping of relevant stakeholders, provide gap analysis and suggest ways in which this knowledge can be used to ensure strengthened collaboration between sectors;

(c) MediPIET: Further Development and Consolidation of the Mediterranean Programme for Intervention Epidemiology Training (2014 – 2019). MediPIET is a EuropeAid-DEVCO funded project under the Instrument contributing to Stability and Peace, linked to the EU Chemical, Biological, Radiological and Nuclear Centres of Excellence initiative – CBRN CoE. The project is led by the Consortium FIIAPP (International and Ibero-American Foundation for Administration and Public policies) – ISCIII, with the scientific leadership of ECDC. This project has been established under a regional perspective to contribute to the overall objective of enhancing health security in the Mediterranean basin by supporting capacity building for the prevention and control of natural or man-made health threats posed by communicable diseases and other threats through a sustainable training programme in intervention epidemiology. The MediPIET project is aimed at consolidating a competent workforce in intervention epidemiology to carry out essential public health functions for the prevention and control of national and cross-border challenges posed by communicable diseases and other health threats enhancing the biological aspect of CBRN CoE.

47. The Spanish Voluntary Visits Program is a Spanish initiative specifically aimed at Ibero-American countries within the framework of these international treaties, having worked so far with a total of 11 Ibero-American countries. As a result of this program, Spain and Chile signed a Memorandum of Understanding in 2017 on matters related to Biosafety and Biosecurity. The most recent activity took place in Madrid in May 2017, in which the participants openly exposed the strengths and weaknesses in terms of Biosafety and Biosecurity in their respective countries. Seven countries - Chile, El Salvador, Guatemala, Panama, Paraguay, Peru, and the Dominican Republic - joined Spain in this exercise. Unfortunately, the last seminar scheduled at the end of 2019 was postponed for logistical reasons by the Chilean authorities, and the pandemic time did not allow to carry it out. Spain intends to maintain the cooperation carried out so far with some countries of the Region (Argentina, Chile, Colombia, Ecuador, El Salvador, Guatemala, Mexico, Panama, Paraguay, Peru and the Dominican Republic) and, at the same time, extend it to other countries of the Region, with which there has been no opportunity to interact yet, using Chile as a platform for the Region. Under additional funding from the EU, Colombia was selected to be a beneficiary of the Extended Assistance Program as part of Decision (CFSP) 2016/51, in support of the Biological Weapons Convention, which was executed during 2018. Representatives of the Department of Customs and Special Taxes, the Spanish State Tax Administration Agency and the Ministry of Foreign Affairs and the EU gave a workshop on Biosafety and Biosecurity and biological weapons took place on 17-18 May 2018.

48. Since the Eighth Review Conference in 2016, Sweden has, via the Public Health Agency, in addition to activities performed within EU projects, supported biosafety and biosecurity globally through activities such as:

(a) two courses, Cross-sectoral bio-risk awareness and mitigation training, arranged on behalf of the European Centre for Disease Prevention and Control (ECDC), one in Budapest, Hungary, with participants from 14 countries in South and Eastern Europe and one in Olhão, Portugal, with participants from remaining EU countries;

(b) a Bio-risk management workshop, held in Maputo, Republic of Mozambique, with participants from Mozambique;

(c) a course, Biosafety Level 4 Laboratory Training at the Public Health Agency of Sweden, Solna, Sweden, with participants from the Republic of Korea;

(d) four Bio-risk Management Courses (BSL2, BSL3 and BSL4) as part of the EU project “Emerging Response to highly dangerous and emerging pathogens at the EU level” (EMERGE), Solna, Sweden, with participants from six European countries.

## VIII. Capacity building to mitigate biological threats

49. The Belgian B-LiFE mobile laboratory (Biological Light Fieldable Laboratory for Emergencies), developed and operated by the Centre for Applied Molecular Technologies (CTMA) of UCLouvain, Belgium, participates in multiple EU projects on pandemic preparedness, CBRN response and first response to Arbovirus outbreaks. It is available for operational missions both within and outside the EU. The laboratory was deployed in Piedmont, Italy in June-July 2020 for COVID-19 pandemic response and participated in international field exercises in Sweden (2017), Russia (2021) and Moldova (2022).

50. An overview is presented in the table below:

<b>B-LiFE International activities : Operational Deployments and Training exercises</b>		
<b>B-LiFE Operational Mission</b>	<b>Public Health Crises</b>	
<i>Monkeypox</i>	2009	Kasai, DRC
<i>Ebola &amp; Just-in Time Training (JiTT)</i>	Dec 2014 – Mar 2015	N’zerekore, Guinea
<i>COVID-19 (B-LiFE hosting Pasteur Institute staff) &amp; JiTT</i>	Jun-July 2021	Turin and Novara, Piedmont
<i>Just in-Time Training (JiTT)</i>	Oct 2022	Chisinau, Moldova
<b>Joint multinational exercises</b>	<b>Public Health</b>	
<i>Bundeswehr Institute of Microbiology Mobile lab</i>	2016	Clueless Snowman, Munich
<i>Bernard Nocht EU Mobile lab</i>	2017	MODEX, Revinge, Sweden
<i>Bernard Nocht EU Mobile lab - Pasteur Institute, Paris</i>	2021	Kazan ,Russian Federation
<b>Joint multinational exercises</b>	<b>CBRN exercises - Biothreat scenario</b>	
<i>Hungarian Armed Forces mobile lab</i>	2018	BioGarden, Brussels

51. The Finnish Ministry for Foreign Affairs has since 2014 provided EUR 150 000 annually to fund a project aiming at Strengthening Biosafety and Biosecurity in Tanzania. The project aims at preventing unintentional and intentional spread of infectious diseases by supporting biosecurity projects in Tanzania. The existence and outbreaks of diseases that are dangerous to life place great strains to the national healthcare system. Efforts to identify microbes that cause infectious diseases are vital to any nation's public health care system. The objectives of the project is to train Tanzanians of the knowledge of making diagnosis of infectious diseases as well as to train Tanzanians to operate related equipment, which enables rapid diagnosis of infectious diseases. Local expertise, detection abilities and developing of biosecurity expertise reduces potential bio-threats. The project is conducted in bilateral collaboration between The Finnish Centre for Bio-threat Preparedness (BUOS)/ Centre for Military Medicine (SOTLK) and Tanzania Veterinary Laboratory Agency (TVLA), Ministry of Livestock and Fisheries Development, United Republic of Tanzania.

52. The Enable and Enhance Initiative, coordinated by the German Federal Foreign Office and the Federal Ministry of Defence, aims at strengthening national security capacities and enabling partner countries to react to regional biological security threats. Activities are implemented in Tunisia, Mauritania, Mali, Burkina Faso, Niger, Chad, Nigeria, Ukraine, and Georgia. In 2016 around EUR 0.4 million, in 2017 around EUR 2.0 million, in 2018 around EUR 1.4 million, in 2019 around EUR 1.7 million, and in 2020 around EUR 2.4 million were spent. The current budget (2021-2023) amounts to around EUR 7.4 million. Moreover,

Germany supports the United Nations Secretary-General's Mechanism (UNSGM) for investigations of the possible use of chemical and biological weapons. To strengthen the operational readiness of the UNSGM Germany provided funds of around EUR 0.7 million (2019-2021) and around EUR 1.0 million (2021-2023) for supporting activities, implemented by the Robert Koch Institute in cooperation with UNODA and the Swedish Defence Research Institute (FOI). As part of these activities, a full-scale ten-day exercise that simulated an investigation of a possible use of biological and toxin weapons ("Capstone Exercise") was conducted in Germany in September 2022. Furthermore, Germany has provided funds amounting to around EUR 2.0 million (2017-2021) for measures aimed at strengthening the UNSGM reference laboratories and continues to provide funds of around EUR 2.2 million (2022-2024).

53. The German Biosecurity Programme is implemented by the Robert Koch Institute, the Bernhard Nocht Institute for Tropical Medicine, the Bundeswehr Institute of Microbiology, the Friedrich Löffler Institute and the GIZ. The programme currently provides assistance to Ukraine, Georgia, Kazakhstan, Morocco, Tunisia, Mauritania, Sudan, Sierra Leone, and Cameroon in order to support them in strengthening their capabilities and capacities to prevent, detect and respond to biological threats posed by high-consequence pathogens. In addition, two supra-regional projects – an online learning platform (GO4BSB) and an academic fellowship programme (GIBACHT) – are being implemented. During the German Biosecurity Programme's previous phase (2017-2019) around EUR 19.1 million were spent, and during its ongoing phase (2020-2022) around EUR 16.9 million are being spent.

54. The Netherlands Institute for Public Health and the Environment (RIVM) is home to several WHO Collaborating Centre (Hock). The WHOcc for Laboratory Preparedness and Response for High Threat Pathogens and Biorisk, launched in 2021, supports the WHO through capacity and capability building activities aimed at laboratory preparedness as well as response activities to high threat pathogens and biorisk management. The work of the Centre takes place in the WHO Euro region, with a focus on the Balkans, Caucasus, and Central Asia.

55. This far, activities performed by the Centre have included:

- (a) the performance of country assessments to map the current situation in diagnostic capacities;
- (b) the delivery of various training activities (either in country or at RIVM) such as a Biosafety Level 3 training and a training program focusing on hantavirus, which covers diagnostics and bio-risk assessment;
- (c) the development of tools to prioritize high threat pathogens and improve sustainability;
- (d) development of the draft document "Preparing for emergencies – A guidance for health laboratories," which provides critical considerations for public health laboratories to improve their response to emerging pathogens or disasters that hamper laboratory operations, in close collaboration with WHO;
- (e) the provision of ad hoc expert advice and technical laboratory support where needed.

56. The Netherlands has a strong tradition in international cooperation on biosafety and biosecurity and it belongs to the world's largest donors to the specialized UN agencies relevant for implementing Article X of the BTWC. In this regard, the longstanding Dutch support for the World Health Organization (WHO) is particularly noteworthy. The Netherlands seeks to back the WHO's work with a sizeable contribution, of which a large part is not earmarked. The WHO undertakes various initiatives, including guiding public health responses to use of biological (and chemical) weapons, as well as ensuring access to quality and use of medical products and technologies. The Netherlands is among the top 5 global contributors to the WHO, having contributed around EUR 60 million (2018-2019) and around EUR 91 million (2020-2021).

57. On March 29, 2017, the Geneva Branch of UNODA and the Delegation of the European Union co-hosted a “Workshop in Support of the Biological Weapons Convention Extended Assistance Programmed”. The workshop was conducted under the auspices of EU Council Decision (2016/51/CFSP) in support of this convention. One aim of the Council Decision is to develop the capacity of beneficiary States Parties to strengthen their implementation of the BTWC at the national level. Ten BTWC States Parties were selected by the EU to receive assistance under the Council Decision. One of the selected States Parties, Malaysia, partnered with the Netherlands to improve BTWC implementation, with a special focus on biosecurity auditing and monitoring. In 2018, experts from the Netherlands Biosecurity Office at RIVM conducted two workshops to strengthen Malaysia’s capacity in the area of biosecurity and by developing a comprehensive biosecurity checklist for laboratory assessments in Malaysia. The workshops were warmly hosted by the Malaysian Science and Technology Research Institute for Defence (STRIDE) and the event was officiated by the Deputy Secretary-General for Policy of Ministry of Defence in Malaysia. The participants of the workshop were well-trained beforehand in biosafety and biosecurity and constitute key players for biosafety and biosecurity in Malaysia. The previously developed checklist was put to the test during a mock assessment at the KPJ Lablink Medical Laboratory in Kuala Lumpur. The outcome of the workshop was consequently presented during a side event at the 2019 BTWC Meeting of Experts.

58. The Netherlands Institute for Public Health and the Environment (RIVM) is involved in several international initiatives to enhance biosafety and biosecurity, and CBRN first response. Within the framework of the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, the Netherlands launched a three-and-a-half-year program in 2020 to assist countries in Southeast and Eastern Europe (SEEE) and in additional WHO EURO countries to develop their capacity on biosafety and biosecurity indicators in a regional context. The project focusses on addressing existing and self-declared biosafety and biosecurity needs, requirements, and gaps. Informed by regional and national needs, the Netherlands aims to implement existing biosecurity tools that have been developed by RIVM experts and tools, that are recognized by the WHO’s International Health Regulations (IHR) as crucial to biosecurity capabilities. In addition, the Netherlands aims to support SEEE countries with National Biosecurity Assessments, implementation of IHR biosafety and biosecurity capacities, and implementation of National Inventories of Dangerous Pathogens. To align these activities with ongoing work in the region, the Netherlands collaborates with regional organizations and experts, as well as international committees and stakeholders already present in the region. Similar programs have been implemented by the Netherlands in Uganda (2014-2016), as well as in Ethiopia, Kenya, and Tanzania (2017-2019).

## **IX. Proposals for future projects**

59. France supports the strengthening of Biosafety and Biosecurity globally through many projects, among which three proposals under the BTWC might be highlighted:

### **A. An Exchange Platform for Voluntary Transparency Exercises**

60. Transparency exercises contribute to strengthening national implementation of the Convention by States parties. It gives the opportunity to States to improve confidence, share best practices and experiences on national implementation, including the voluntary exchange of information on their national implementation, enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions, and by taking also into account mandatory as well as voluntary biosafety and biosecurity requirements.

61. Voluntary transparency exercises have a true added value in order to contribute to strengthening national implementation of the Convention by States parties, enhancing confidence among States Parties and improving international cooperation. Recalling the importance of confidence-building measures under the BTWC and taking note of initiatives undertaken by BTWC States parties in that regard, including through the organization of

voluntary transparency exercises, France proposes to create an exchange platform for voluntary transparency exercises.

62. This platform will allow to:

(a) strengthen the implementation of the BTWC, and in particular support national implementation efforts;

(b) discuss and exchange information and best practices on previous and future voluntary exercises envisaged by the BTWC States parties;

(c) create a compendium of all transparency exercises conducted so far which will be regularly updated and submitted as a BTWC working paper;

(d) identify potential needs for assistance and cooperation, including reusable in the implementation of Article X.

## **B. Proposal for the Establishment of a Database for Assistance Under Article VII of the Biological and Toxin Weapons Convention**

63. India and France submitted a proposal for the establishment of a database for assistance in the framework of Article VII. The proposal is for the BTWC ISU to establish, administer and maintain a database on a secure web-based platform, open to all States Parties and to be hosted on the BTWC ISU website. The purpose of a database on Article VII would be solely to implement Article VII of the BTWC and allow matching specific offers and requests for assistance.

64. The proposal seeks to respond to the need for developing effective measures and coordination with relevant international organizations to respond to biological or toxin weapons occurrences, while providing benefits to States Parties in terms of awareness, information exchange, national and international preparedness, and capacity-building for such an event. The database would include assistance in various forms including emergency assistance, containment measures and recovery assistance.

65. These may include one or more of the following: expertise, information, protection, detection, decontamination, prophylactic and medical, and other equipment that could be required to assist the States Parties in the event that a State Party is exposed to danger as a result of a violation of the Convention. The offers of assistance could emanate from States parties, individually or together with other States, as well as relevant international organizations.

## **C. Proposal for Establishment of an International Platform Dedicated to Biosecurity and Biosafety – SecBio**

66. France proposes to its partners of the Convention a collaborative project on law and documentary library. It could take the form of a multidisciplinary digital area dedicated to biosafety and biosecurity – SecBio.

67. SecBio is intended to be a development support tool in the field of biosafety and biosecurity. In this respect, this project contributes to the implementation of the Biological and Toxin Weapons Convention (BTWC). In particular, this project is in line with the provisions of Article X of the Convention in that it aims to facilitate the exchange of information for peaceful purposes.

68. SecBio is intended to be an international online platform for biosafety and biosecurity. It is an interactive tool to inform, train and connect biosafety and biosecurity stakeholders. The online Platform will be accessible to all States Parties and international organizations which will be able to both use the Platform and nourish it.

69. There are three main features within SecBio:

(a) a searchable repository for biosafety and biosecurity legal framework, treaties, laws, regulations, case law, norms, standards and best practices, as well as scientific publications;

(b) a learning module for users to build a project and challenge their knowledge;

(c) a forum for expert's networking to exchange information, data and best practices.

70. The use of this tool by States Parties could allow the Platform to become the international reference on the issue and therefore increase the global biosafety and biosecurity level playing field.

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