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REPORT

# Voluntary Transparency Initiatives: The Case of Peer Review Exercises in the Context of the BWC

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## Abbreviations

|              |   |
|--------------|---|
| <b>BSL-3</b> | Biosafety Level 3                       |
| <b>BWC</b>   | Biological and Toxin Weapons Convention |
| <b>CBM</b>   | confidence-building measure             |
| <b>ISU</b>   | Implementation Support Unit             |
| <b>PRE</b>   | peer review exercise                    |
| <b>VTI</b>   | voluntary transparency initiative       |

# Executive Summary

The Biological and Toxin Weapons Convention (BWC) lacks any mechanism to verify compliance. In the absence of a verification mechanism and while not a substitute for such a system, states parties have developed a system of confidence-building measures (CBMs) to increase transparency around a state’s activities in the biological field. However, over the years various limitations in the CBMs regime have been noted.

To address these limitations and look for innovative approaches to strengthen the Convention, some states parties have explored the concept of voluntary transparency initiatives (VTIs), non-binding measures agreed by interested states parties to enhance transparency among other things. Among several VTIs is the concept of peer review exercises (PREs) in which one or more states parties invite others to assess selected aspects of their treaty implementation through a flexible and tailored approach that can include document review, facility visits and exchanges of best practices.

In 2011 France proposed the concept of a peer review mechanism for the BWC that could, among other things, strengthen national implementation, increase confidence in compliance and improve international cooperation, while respecting the sovereignty of the participating states. Subsequently, six peer review exercises (PREs) have been organized (see Table 1) along with several other initiatives under the broader VTI framework.

Table 1. Summary of BWC peer review exercises

| LOCATION AND DATES  | MAIN OBJECTIVES   | FOCUS  | STAKEHOLDERS   | EXERCISE PROCESS  |
|---|---|--|--|---|
| FRANCE<br><br>Paris and<br>Maisons-Alfort<br><br>4–6 December<br>2013 | Provide proof of concept of the PRE proposal  | Biosafety and biosecurity (including awareness-raising)<br><br>Export control            | National experts from several agencies<br><br>Other state party experts<br><br>National non-governmental experts | Presentations<br><br>Visits to two laboratories   |
| BELGIUM, LUXEMBOURG and THE NETHERLANDS<br><br>June to November 2015  | Strengthen national implementation<br><br>Raise awareness among national stakeholders<br><br>Provide CBM feedback | Biological military defence research<br><br>Legislation<br><br>Biosafety and biosecurity | National experts from several ministries of the three states parties   | Written assessment of CBM Forms A and E<br><br>Meetings to clarify CBM forms<br><br>Visits to five facilities |

| LOCATION AND DATES                                  | MAIN OBJECTIVES   | FOCUS   | STAKE-HOLDERS   | EXERCISE PROCESS  |
|---|---|---|---|---|
| GERMANY<br>Munich<br>2–4 August<br>2016             | Augment confidence in compliance  | Biological military defence research                                  | National experts from various ministries<br>Other state party experts<br>International non-governmental experts   | Visit to a microbiology research institute  |
| MOROCCO<br>Rabat and Casablanca<br>9–11 May<br>2017 | Strengthen national implementation<br>Augment confidence in compliance<br>Enhance international cooperation | Biosafety and biosecurity (including pathogen and biorisk management) | National experts from several ministries and agencies<br>Other state party experts<br>National non-governmental experts<br>BWC Implementation Support Unit                            | Presentations<br>Visits to five institutions  |
| GEORGIA<br>Tbilisi<br>14–15 November<br>2018        | Augment confidence in compliance  | Biological research   | National experts from several agencies<br>Other state party experts<br>International non-governmental experts<br>BWC Implementation Support Unit and European External Action Service | Presentations<br>Visit to a facility, including a Biosafety Level 3 laboratory<br>Discussion and assessment |
| KYRGYZSTAN<br>Issyk Kul<br>16–18 August<br>2022     | Strengthen national implementation<br>Enhance international cooperation                                     | Legislation<br>Biosafety and biosecurity<br>International cooperation | National experts from various agencies<br>Other state party experts<br>International and regional organizations, including BWC Implementation Support Unit                            | Preparatory meetings<br>Presentations   |

There is no one size fits all approach to implementing the BWC. Implementation varies depending on the national context. Correspondingly, states parties may also have different requirements for increasing transparency, exchanging good practices and sharing progress on national implementation. The PRE is a **flexible instrument** that is useful in this regard and generates ownership through a **bottom-up approach**. The exercises analyzed in this report vary in their duration and locations, objectives, areas of focus, stakeholders, processes and results, which shows that the tool can be adapted to each state party's needs and priorities.

The report also demonstrates the value of PREs as tools to **increase transparency, improve national implementation of the BWC, strengthen networks of experts nationally and internationally and support international cooperation and assistance**. The process of conducting a PRE can generate additional benefits to those explicitly intended, for example in bringing together different branches of government and other relevant stakeholders such as NGOs and scientific institutions to collectively discuss aspects of BWC implementation and potentially foster communities of actors that serve as guardians of BWC compliance. In light of these benefits, many states parties have expressed support for organizing PREs.

However, not all states parties are supportive of VTIs and PREs, as indicated in this report. Several states parties have expressed scepticism over the utility of PREs. One particular criticism is that the organizing states parties **retain control** over the objectives, focus, participants, and access to information involved in PREs. This minimizes the extent to which such initiatives can ever really build confidence in compliance among *all* states parties. Besides, some criticize the PRE format's malleability due to the **lack of a consolidated framework** that would allow an easier comparative analysis and measurement of success. The **enduring value** of the PREs is also unclear, as it is difficult to gauge the degree to which the organized exercises have fulfilled their objectives in the longer term and generated sustainable change, for example in improving national implementation.

If BWC states parties are interested in continuing work in this area, they can consider the lessons learned from previous exercises and put measures in place to address or mitigate issues of concern. Further work on PREs could look at building in metrics during the planning phase to enable the longer-term success of such initiatives to be assessed. Furthermore, states parties could consider developing a series of standardized templates to address specific topics of interest at any PREs that may be conducted in the future.

PREs and other voluntary measures are not a substitute for a verification regime, should not replace existing confidence-building measures, and should not preclude any future mechanism to strengthen the Convention. However, as this report demonstrates, they can play a role in strengthening the BWC and the wider biosecurity regime.

# 1 Introduction

The Biological and Toxin Weapons Convention (BWC) was opened for signature on 10 April 1972 and entered into force on 26 March 1975. Over the course of nearly half a century, BWC states parties have made a concerted effort to strengthen the Convention. However, it still lacks a verification mechanism similar to other disarmament treaties. Ongoing discussions in the Working Group on the Strengthening of the Convention may yet set out a road map for such a regime. In the absence of such a mechanism, and due to sensitivities around aspects of verification and compliance, one of the key tools that the BWC has at the moment to increase transparency is the confidence-building measures (CBMs) that each state party is requested to submit each year to the BWC Implementation Support Unit (ISU).

In the past few years, the number of states parties submitting CBMs has increased, reaching 54% of all states parties in 2023.<sup>1</sup> However, some submissions are incomplete and in some cases there are inconsistencies across the forms.<sup>2</sup> Moreover, as the BWC ISU has no mandate to assess CBM submissions and not all of them are open to the public, the analysis of this data is limited. In part as a result of these constraints, some states parties have explored alternative tools to increase transparency, including through voluntary transparency initiatives (VTIs), such as peer review exercises (PREs).

There are no agreed definitions for these concepts under the framework of the BWC. In the context of this report, VTIs are measures intended to enhance transparency and build confidence in compliance. These initiatives have been non-binding and voluntarily agreed either bilaterally or multilaterally between the interested states parties. PREs are conceived as a type of VTI where one or more states parties invite others to assess their implementation of selected aspects of their BWC measures through a flexible approach that allows tailoring to the preferences and needs of the organizers or participants. PREs have been comprised of a number of elements, including presentations, documentation review, site visits and exchanges of best practices. VTIs, such as PREs, are not a substitute for a verification mechanism. Nor are they intended to replace CBMs or any future mechanism to facilitate the implementation of the BWC or assess compliance. However, as this report demonstrates, they can play a key role in strengthening the Convention.

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1 Daniel Feakes, "Confidence building measures under the Biological Weapons Convention", Third Session of the Working Group on Strengthening of the Convention (4-8 December 2023), [https://docs-library.unoda.org/Biological\\_Weapons\\_Convention\\_-Working\\_Group\\_on\\_the\\_strengthening\\_of\\_the\\_ConventionThird\\_session\\_\(2023\)/2023-1204\\_ISU\\_ppt\\_on\\_transparency\\_and\\_CBM\\_final.pdf](https://docs-library.unoda.org/Biological_Weapons_Convention_-Working_Group_on_the_strengthening_of_the_ConventionThird_session_(2023)/2023-1204_ISU_ppt_on_transparency_and_CBM_final.pdf).

2 Ibid.



This report begins by laying out the genesis and evolution of the implementation of peer review-type initiatives in the context of other voluntary initiatives to enhance transparency. The report proceeds to outline the key elements of the six PREs that were organized to date, providing an overview of their duration, location, objectives, focus, stakeholders, process, and results. The report then turns to address the wider discussion within the BWC around the VTIs in general and the PREs in particular. The report concludes with some reflections on the advantages and disadvantages of such initiatives and possible ways to advance work on this topic. An annex to this report includes a side by side summary of the main features of each of the PREs that were held to help compare the different ways in which they are conceived and executed.

## 2 History and evolution of peer review exercises

The concept of PRE had its genesis at the Seventh BWC Review Conference in 2011. After nearly a decade of stalemate following the collapse of negotiations around a verification protocol, several states parties proposed different approaches to enhance transparency, improve national implementation, assess compliance and strengthen the Convention. For example, one of the proposals was a “compliance assessment” through national declarations on the implementation measures of the BWC, forwarded by Canada in 2010, then joined by Switzerland and the Czech Republic.<sup>3</sup>

As part of this trend, France submitted a working paper to the Seventh BWC Review Conference to initiate a debate on a new mechanism to enhance confidence in national implementation and to foster international cooperation.<sup>4</sup> The French proposal suggested the exploration of a peer review mechanism for the BWC as an example of “more proactive mechanisms for enhancing confidence among States parties”.<sup>5</sup>

The French proposal drew from experiences in other fields, specifically the Financial Action Task Force on money laundering.<sup>6</sup> The working paper noted that in this area, the “introduction of a peer review mechanism has helped States parties involved in the Task Force to implement a set of recommendations that they themselves had developed”.<sup>7</sup> The paper went on to lay out some possible features of a voluntary BWC peer review mechanism, suggesting that it could cover “national legislation, biosecurity as such and biosecurity standards, national codes of conduct for scientists and operational planning.” The working paper concluded by identifying several areas in which the PREs could be beneficial while respecting the sovereignty of the organizing state. These advantages included strengthening national implementation, increasing confidence in compliance and improving international cooperation.<sup>8</sup>

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3 Canada, the Czech Republic and Switzerland, “National Implementation of the BTWC: Compliance Assessment: update”, BWC/MSP/2012/WP.6, 5 December 2012. <https://undocs.org/BWC/MSP/2012/WP.6>.

4 France. “A peer review mechanism for the Biological Weapons Convention: enhancing confidence in national implementation and international cooperation”, BWC/CONF.VII/WP.28, 13 December 2011. <https://undocs.org/BWC/CONF.VII/WP.28>.

5 Ibid.

6 James Revill. *A Peer-Review Mechanism for the Biological and Toxins Weapons Convention*, (Geneva: UNIDIR, 2012), pp. 30–34, <https://unidir.org/publication/a-peer-review-mechanism-for-the-biological-and-toxin-weapons-convention>.

7 Ibid.

8 Ibid.

Building on this working paper and wider interest in the concept of BWC peer review, in 2012 UNIDIR published a detailed study on a peer review mechanism for the BWC.<sup>9</sup> This report analysed similar processes employed by other entities, including the African Union, the Development Assistance Committee of the Organisation for Economic Co-operation and Development, the Financial Action Task Force, and the International Atomic Energy Agency. The report further identified a number of functions of a peer review mechanism, including as a transparency and confidence-building mechanism, as a mechanism for quality control, and as a means of sharing best practices and building capacity. The report went on to look at some of the advantages, disadvantages and requirements for a peer review mechanism, before concluding with a series of steps for taking forward such a mechanism. It was noted that peer reviews could be applied to assess a wide range of topics in a flexible way, with exercises tailored to address the requirements of the organizing state.

In December 2013, France organized a pilot PRE, designed as a proof of concept for a peer review mechanism. This first peer review exercise was designed to “strengthen confidence between State parties, enhance national implementation of the Convention and enable exchanges of best practices”.<sup>10</sup>

Several states parties have subsequently undertaken peer review-type exercises, with various modalities, topics and outcomes. One early initiative was a PRE between Belgium, Luxembourg and the Kingdom of the Netherlands – the Benelux countries – in 2015, focused on assessing CBMs.<sup>11</sup> Drawing from this exercise and the earlier French pilot study, a working paper submitted by Belgium, France, Luxembourg and the Kingdom of the Netherlands to the Eighth BWC Review Conference in 2016 identified a number of anticipated benefits of this proposed mechanism, including improving national implementation, building confidence through increased transparency, and offering the possibility of fostering international cooperation.<sup>12</sup>

The next PRE was held at a military microbiology research facility in Munich, Germany, in August 2016. National and international experts visited the facility, that had been declared in CBM Form A and included a Biosafety Level 3 (BSL-3) laboratory. A working paper was subsequently published describing the details of the exercise and the results achieved.<sup>13</sup>

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9 Ibid.

10 France, “Exercice pilote de revue par les pairs, Paris, 4-6 décembre 2013”, BWC/MSP/2013/WP.8, 9 December 2013, <https://undocs.org/BWC/MSP/2013/WP.8>.

11 Kingdom of the Netherlands, “Statement on behalf of the Benelux-countries, at the Preparatory Committee for the 8th Review Conference of the Biological and Toxin Weapons Convention (BTWC)”, 8 August 2016, [https://docs-library.unoda.org/Biological\\_Weapons\\_Convention\\_-\\_Preparatory\\_Committee\\_for\\_the\\_Eighth\\_Review\\_Conference\\_\(2016\)/Benelux%2B-%2BBTWC%2BPrepCom%2B2%2B-%2BJoint%2BStatement%2BBenelux-%2B-%2BAGenda%2BItem%2B5%2B-%2BPeer%2BReview%2B-%2Bfinal2.pdf](https://docs-library.unoda.org/Biological_Weapons_Convention_-_Preparatory_Committee_for_the_Eighth_Review_Conference_(2016)/Benelux%2B-%2BBTWC%2BPrepCom%2B2%2B-%2BJoint%2BStatement%2BBenelux-%2B-%2BAGenda%2BItem%2B5%2B-%2BPeer%2BReview%2B-%2Bfinal2.pdf).

12 Belgium, France, Luxembourg and the Kingdom of the Netherlands. “Peer review: an innovative way to strengthen the BWC”, BWC/CONF.VIII/PC/WP.13, 4 May 2016, <https://undocs.org/BWC/CONF.VIII/PC/WP.13>.

13 Germany, “Confidence in compliance – peer review visit exercise at the Bundeswehr Institute of Microbiology in Munich, Germany”, BWC/CONF.VIII/WP.11, 21 October 2016, <https://undocs.org/BWC/CONF.VIII/WP.11>. See also <https://undocs.org/BWC/CONF.VIII/WP.11/Corr.1>.

In the meantime, other VTIs such as implementation reviews or voluntary visits were also being further developed. In 2016, Canada, Chile, Ghana, Mexico and the United States explored the concept of an implementation review, which combined elements from both compliance assessment and peer review initiatives.<sup>14</sup> This process involved, among other things, the development of “an agreed format for reports on measures to implement the BWC’s obligations”, followed by the completion and exchange of reports and a series of visits to capitals and facilities. The exercise was presented in a series of working papers submitted to the Eighth BWC Review Conference.<sup>15, 16, 17, 18</sup>

Chile and Spain presented a proposal for voluntary visits within the framework of the BWC in 2016.<sup>19</sup> The aim was to increase cooperation and transparency between states parties, particularly on biosafety and biosecurity issues, but also on science and technology, assistance in cases of alleged use of biological weapons, and international cooperation, among other topics. The following year, the Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Panama, Paraguay, Peru and Spain submitted a working paper outlining how they had organised a series of visits focused on biosafety and biosecurity, including visits to 20 laboratories in Ecuador in 2015.<sup>20</sup> The report highlighted some of the follow-up actions, including the development by Chile of a national plan for biosecurity and the proposed establishment of a national commission for biosafety.

At the Eighth BWC Review Conference in 2016, a group of states parties provided a summary of their experiences with VTIs in a working paper submitted by Belgium, Canada, Chile, the Czech Republic, France, Germany, Ghana, Luxembourg, Mexico, the Kingdom of the Netherlands, Spain, Switzerland, and the United States. The paper included short descriptions of the different exercises, identified several benefits of voluntary exercises and suggested language to be included in the final report of the Review Conference, including encouraging “additional States Parties to organize or participate in future voluntary transparency initiatives”.<sup>21</sup> This language was not included in the final document.

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- 14 Canada, Chile, Ghana, Mexico and the United States of America, “BWC implementation review initiative”, BWC/CONF.VIII/WP.22, 8 November 2016, <https://undocs.org/BWC/CONF.VIII/WP.22>.
  - 15 United States of America, “BWC implementation review initiative: report by the United States of America on the visit to Washington, DC”, BWC/CONF.VIII/WP.18, 8 November 2016, <https://undocs.org/BWC/CONF.VIII/WP.18>.
  - 16 Canada, “BWC implementation review initiative: report by Canada on the visit to Ottawa”, BWC/CONF.VIII/WP.27, 9 November 2016, <https://undocs.org/BWC/CONF.VIII/WP.27>.
  - 17 Ghana, “Ghana’s report on Biological Weapons Convention (BWC) implementation review exercise held in Accra - 19–20 October, 2016”, BWC/CONF.VIII/WP.33, 14 November 2016, <https://undocs.org/BWC/CONF.VIII/WP.33>.
  - 18 Chile, “Ejercicio de revisión de la implementación informe de visita a Santiago de Chile”, BWC/CONF.VIII/WP.4, 17 November 2016, <https://undocs.org/BWC/CONF.VIII/WP.41>.
  - 19 Chile and Spain, “Visitas voluntarias en el marco de la CABT: el concepto”, BWC/CONF.VIII/PC/WP.28, 10 August 2016, <https://undocs.org/BWC/CONF.VIII/PC/WP.28>.
  - 20 Chile, Ecuador, El Salvador, España, Guatemala, México, República Dominicana, Panamá, Paraguay and Perú, “Visitas voluntarias: un instrumento para una mejor cooperación en el marco de la CABT”, BWC/MSP/2017/WP.13, 1 December 2017, <https://undocs.org/BWC/MSP/2017/WP.13>.
  - 21 Belgium, Canada, Chile, Czech Republic, France, Ghana, Germany, Luxembourg, Mexico, the Kingdom of the Netherlands, Spain, Switzerland and the United States, “Building Confidence Through Voluntary Transparency Exercises”, BWC/CONF.VIII/WP.35, 10 November 2016. <https://undocs.org/BWC/CONF.VIII/WP.35>.

Subsequently, two further PREs were organized. One took place in Morocco in 2017. This Moroccan peer review focused on how the country handles pathogens, emphasizing biosafety, biosecurity and biorisk management measures. The peer review included visits to five government institutions and laboratories. The next PRE was organized in 2018 in Tbilisi, Georgia, with a different angle. This exercise opened the doors of the national health laboratory to a group of international experts, with a view to showing the nature of work undertaken. The last PRE to date aimed to strengthen the implementation of the BWC in Kyrgyzstan. This PRE included a preparatory phase in 2021 in Geneva, Switzerland, followed by an exercise that took place in August 2022 in Kyrgyzstan with the participation of national experts from other BWC state parties. This exercise was focused on biosafety and biosecurity, legislation and cooperation and assistance.

Finally, in an effort to take stock of the various VTIs, at the Ninth Review Conference in 2022, France (together with Belgium, Canada, Chile, Czechia, Georgia, Luxembourg, Mexico, Morocco, the Kingdom of the Netherlands and Spain)<sup>22</sup> proposed creating an exchange platform – in the format of a meeting – to, among other things:

*Discuss and exchange information and best practices on voluntary transparency exercises conducted by BTWC States parties ... [and] Create a Compendium of all voluntary transparency exercises, as well as related best practices, conducted by BTWC State parties and lessons learned from exchanges within the Platform; and ... Identify potential needs for assistance and cooperation for national implementation of the Convention.*<sup>23</sup>

As shown in this chronology, there were different approaches to voluntary initiatives within the BWC. The PRE format in particular was developed over time as a flexible tool that can take different forms and be adapted to various contexts and requirements.

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22 Belgium, Canada, Chile, Czech Republic, France, Georgia, Germany, Luxembourg, Mexico, Morocco, Netherlands and Spain, “An exchange platform for voluntary transparency exercises”, BWC/CONF.IX/WP.21, 16 November 2022, <https://undocs.org/BWC/CONF.IX/WP.21>.

23 Ibid.

# 3 Key elements of past peer review exercises

This section analyses each of the PREs organized so far in relation to the criteria in Table 2 to facilitate comparison and reflection on the concept and execution of PREs. Despite their differences, they all share the intention of increasing transparency, enhancing confidence between participants, and exchanging best practices concerning BWC national implementation, with the overall purpose of strengthening the BWC and the wider biosecurity regime.

Table 2. Criteria for analysis of peer review exercises

|                       |   |
|-----------------------|---|
| Duration and location | The length and location(s) of the exercise.   |
| Objectives            | The objectives (ultimate goals) of the exercise, as outlined in the available documents.  |
| Focus                 | The aspects of BWC implementation selected as the main topic(s) of the exercise.  |
| Stakeholders          | The participating organizations (attending or presenting) from the partnering states parties, as well as other participants if any (e.g. international organization representatives, experts from other countries). |
| Process               | The process and methods applied in the exercise.  |
| Results               | The substantive findings of the exercise and the experience with the peer review process itself, as captured in the available documents.  |

## A. France

### I. Duration and location

France, as the original champion of the concept of peer review in the BWC, organized the first pilot PRE.<sup>24</sup> It took place on 4–6 December 2013 in Paris and lasted three days. The exercise included visits to two laboratories: the Cellule d’Intervention Biologique d’Urgence at the Pasteur Institute in Paris, which responds to specialized biological emergencies, and the ANSES<sup>25</sup> Animal Health Laboratory in Maisons-Alfort. The first day of activities took place at the Ministry of Foreign Affairs and the last at the Fondation pour la Recherche Stratégique (FRS), both in Paris.

24 France, <https://undocs.org/BWC/MSP/2013/WP.8>, p. 5.

25 French Agency for Food, Environmental and Occupational Health & Safety.

## II. Objectives

The objective of this pilot exercise was to test the concept of the proposal presented by France to the Seventh BWC Review Conference in December 2011.<sup>26</sup>

## III. Focus

The agenda for the peer review pilot exercise covered discussion around three areas of France's BWC implementation:

- The system of biosafety and biosecurity, specifically the “national authorization and control system for manipulating dangerous pathogens”<sup>27</sup>
- The national export control system, with a specific focus on the licensing procedures for dual-use biological materials and related equipment
- The biosecurity and biosafety awareness-raising policy, including the teaching and training measures developed or implemented at different institutions

## IV. Stakeholders

The participants of this exercise can be divided into two groups. The first was a panel of international experts representing Canada, China, Germany, India, Mexico, Morocco, Switzerland, the United Kingdom of Great Britain and Northern Ireland, and the United States.

The second group consisted of representatives of French governmental and non-governmental organizations, including the Ministry of Foreign Affairs, the French National Agency for Medicines and Health Products Safety, the Ministry of Industrial Renewal, the Pasteur Institute of the Ministry of Health, the ANSES Animal Health Laboratory, the National Institute for Health and Medical Research, the French Military Health Service; and the Fondation pour la Recherche Stratégique.

## V. Process

The exercise included a series of presentations by technical experts from the French government on the three identified focus areas of national implementation. The participants then visited laboratories to see how the three different aspects already discussed were implemented in practice and to identify areas for improvement.<sup>28</sup> The results of the PRE were assessed through a questionnaire to participants at the end of the exercise.

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26 France, BWC/CONF.VII/WP.28.

27 France, BWC/MSP/2013/WP.8.

28 France, “Exercice pilote de revue par les pairs tenu du 4 au 6 décembre 2013 à Paris”, BWC/MSP/2014/WP.3, 2 December 2014, p. 12, <https://undocs.org/BWC/MSP/2014/WP.3>.

## VI. Results

The 2014 French working paper submitted to the BWC states that “Overall, this pilot exercise was assessed as an excellent approach in bringing closer and explaining the particularities of the French legislative system relevant to the BTWC”.<sup>29</sup> An important point shown through the exercise was that each state party implements the Convention in its own way, including which decision-making bodies are involved and how they interact.

Moreover, the French working paper notes that the participants appreciated the opportunity to talk with the laboratory staff. The participants found the visits to the laboratories particularly useful as they could see how the regulations on the national authorization and control system for manipulating dangerous pathogens worked in practice.<sup>30</sup>

Some experts indicated that it would have been useful to expand the focus of the exercise to include presentations from other ministries involved in the implementation of the BWC; other participants contended that having a narrower focus would have allowed for an in-depth discussion of the topics. Participants had different perceptions on the wider value of peer review. Some participants were sceptical about how useful implementing a PRE through the BWC would be and indicated a preference for a more formal verification regime instead.<sup>31</sup>

However, there was agreement regarding the usefulness of the PRE itself as a transparency tool and how much it had helped in strengthening the confidence between the parties. The participants also agreed on the utility of the exercise for strengthening the national implementation of the BWC. The best practices shared and gaps identified could be useful not only for France to improve its implementation but also for other countries since they could benefit from the information shared. Some states parties asked for more detailed information about French national legislation.<sup>32</sup>

The process also generated some early lessons learned, particularly around the breadth of PREs. Some participants considered that future exercises should address other aspects of the BWC, such as measures to respond to alleged use and international cooperation, while still including aspects relating to Articles III and IV. Also, to promote the strengthening of BWC implementation beyond the participating parties, the participants proposed making use of currently available tools in the framework of the Convention to share the best practices and information identified in the exercise.<sup>33</sup>

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29 Ibid, p. 15.

30 Ibid, p. 15.

31 Ibid, p. 15.

32 Ibid, p. 16.

33 Ibid, p. 16.



## **B. Benelux countries**

### **I. Duration and location**

The three Benelux countries – Belgium, Luxembourg and the Kingdom of the Netherlands – jointly organized the second PRE. This exercise took place between June and November 2015 across the three countries. The in-person visits took place at the following locations:

- The Centre for Applied Molecular Technologies of the Defence Laboratory Department in Brussels, Belgium, on 9 November
- The Health National Laboratory in Dudelange, and the Institute of Health in Esch-Sur Alzette, Luxembourg, on 17 November
- The Organisation for Applied Scientific Research in Rijswijk and the National Institute of Public Health and the Environment in Bilthoven, Kingdom of the Netherlands, on 27 November

### **II. Objectives**

The objective of the exercise was to “improve the national implementation of the Convention while also contributing to build confidence between States Parties”.<sup>34</sup> In a 2015 working paper submitted by the three Benelux states, four specific objectives were identified:<sup>35</sup>

- Reviewing “elements of national implementation by qualified experts and sharing best practices” in order to enhance national implementation
- Raising awareness of the BWC among national stakeholders to encourage participation in relevant inter-agency initiatives
- Contributing to discussion at the Eighth BWC Review Conference by presenting their experiences with declarations, consultations and on-site visits
- Enabling feedback on CBMs and increasing their role as a declaration tool within the Convention

### **III. Focus**

The Benelux PRE focused on the following aspects of CBMs in each participating state party:<sup>36</sup>

- National biological defence research and development programmes and research centres and laboratories (as declared on Form A of the CBM)
- National legislation, regulations and other measures related to BWC implementation (as declared on Form E of the CBM), focusing on national oversight of biosafety and biosecurity

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34 Belgium, Luxembourg and the Netherlands, “Benelux BTWC peer review: outline of key features and objectives”, BWC/MSP/2015/MX/WP.13/Rev1, 6 August 2015, p. 1, <https://undocs.org/BWC/MSP/2015/MX/WP.13/Rev1>.

35 Ibid, p. 2.

36 Ibid, p. 2.

## IV. Stakeholders

The main stakeholders involved in the exercise were the three national peer review teams, each consisting of experts from the departments of defence, public health, and foreign affairs. Most participating national experts had been involved in the drafting and submission of the national CBMs.<sup>37</sup> There were no third-party participants.

## V. Process

The Benelux exercise consisted of two phases. The first was a written phase in which experts from each country assessed Forms A and E of one another's 2015 CBMs.<sup>38</sup> The second was an in-person phase that included a meeting to clarify points on the shared CBM forms and visits to relevant facilities declared on CBM Form A in each of the participating states parties to check the consistency of the information submitted in the CBM with the "on-site reality".<sup>39</sup>

## VI. Results

Regarding the substantive issues, the Benelux countries noted in a working paper that there was agreement about the adequacy of the biosafety standards and their implementation in the three states parties, although approaches to biosecurity differed in certain aspects.<sup>40</sup> The working paper further highlighted a number of specific tools employed to increase biosecurity awareness and stressed the importance of a financially viable, customized approach to biosecurity in different laboratories, even among countries in close proximity.<sup>41</sup>

The working paper indicated that participating experts were satisfied with the results and included a number of observations on the peer review process. It pointed out that one reason for the exercise was "to make sure that the BTWC remains a living instrument, not only on paper and in Geneva, but also among experts and practitioners within States Parties". The paper further indicated how the process provided those compiling CBMs with in-depth feedback, thereby improving "the accessibility and relevance of the CBMs of the participating countries"<sup>42</sup>. The Benelux countries concluded that an approach to peer review comprising a written phase followed by in-country visits could help in "improving national implementation, increasing international cooperation and raising awareness of the BTWC among national stakeholders".<sup>43</sup>

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37 Belgium, Luxembourg and the Netherlands, "Benelux BWC peer review: initial observations", BWC/MSP/2015/WP.12, 17 December 2015, p. 1, <https://undocs.org/BWC/MSP/2015/WP.12>.

38 Unfortunately, the documents produced during this phase were not openly available; as a consequence, it was not possible to include more detail about the scope and observations made by the experts.

39 Belgium, Luxembourg and the Netherlands, BWC/MSP/2015/MX/WP.13/Rev.1.

40 Belgium, Luxembourg and the Netherlands, BWC/MSP/2015/WP.12.

41 The working paper states that the "function of a laboratory dictates the type of measures needed and their respective feasibility".

42 Belgium, Luxembourg and the Netherlands, BWC/MSP/2015/WP.12.

43 Ibid.

Finally, the paper also outlined some of the lessons that could be implemented in future exercises. These included the potential value of organizing a meeting ahead of a visit to the host countries to “run through the issues that would require special attention and make the visit more effective”.<sup>44</sup> Also, some participants felt more time could be beneficial for an in-depth exchange and could increase understanding of one another’s national systems with a view to further improving them.

## C. Germany

### I. Duration and location

A third PRE was jointly organized by the Federal Foreign Office and the Ministry of Defence of Germany. It was held on 2–4 August 2016 at the Bundeswehr Institute of Microbiology in Munich.

### II. Objectives

As outlined in a working paper submitted by Germany to the Eighth BWC Review Conference, the main objective of this process was to “test whether a Peer Review visit could serve as a tool to increase transparency among the States Parties to the Convention with regard to research and development activities”<sup>45</sup> and therefore contribute to discussion around the relevance and value of PREs in the context of the BWC.

The working paper further specified that the PRE could “provide a good opportunity to share best practices, discuss national implementation systems, raise awareness and establish contacts, which could serve to increase international cooperation”.<sup>46</sup>

### III. Focus

The German exercise focused on one military research facility, the Bundeswehr Institute of Microbiology in Munich. Its aim was an:

*assessment of all aspects of the facility that are relevant to provisions of the BTWC and provided on the CBM Form, comprising laboratory activities and equipment, infrastructure, security measures including access control, laboratory conduct, documentation in relation to research and development, including Dual Use Research of Concern (DURC), as well as procedures for the transfer and export of pathogens and toxins.*<sup>47</sup>

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44 Ibid.

45 Germany, BWC/CONF.VIII/WP.11. See also <https://undocs.org/BWC/CONF.VIII/WP.11/Corr.1>.

46 Ibid.

47 Ibid, p. 3.

## IV. Stakeholders

Officials from the German Federal Foreign Office and Ministry of Defence participated in the process, along with representatives of the German Partnership Programme for Excellence in Biological and Health Security and of specific laboratory units, who delivered presentations.

The German Federal Foreign Office invited all interested states parties to participate in the exercise. Over 20 diplomats and experts, including members of civil society, from the following countries participated in the exercise: Algeria, Austria, Belgium, Burundi, France, Georgia, Indonesia, Jordan, Lithuania, Myanmar, the Kingdom of the Netherlands, Nigeria, Norway, Poland, Portugal, Saudi Arabia, Switzerland, Uganda, the United Kingdom, the United States, and Yemen.<sup>48</sup>

## V. Process

Participants in this PRE were divided into two teams: a visiting team and a monitoring team. The visiting team comprised four biology experts and six “expert observers” who participated in a pre-visit briefing, followed by a tour of the facility. The monitoring team comprised ten participants who monitored the exercise and participated in presentations about BWC-related legal and policy matters, biosecurity, and biosafety.

The process employed a number of methods, including:

*[an] examination of rooms, laboratory equipment and installations; requests for visual access to paper documents; requests for written answers to questions that were submitted in writing prior to the implementation of the activities; interviewing of personnel; requests for photographs and the determination of geographical coordinates.*<sup>49</sup>

At the exercise’s conclusion, the visiting team prepared a summary report in collaboration with the monitoring team and the facility staff. The summary report was then discussed among the participants in the final session of the process. Subsequently, a paper was published by one civil society member, in their capacity as a participating expert.<sup>50</sup>

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48 Ibid, p. 3.

49 Ibid.

50 Filippa Lentzos, “Increasing transparency in biodefense: a 2016 visit to a German military medical biodefense facility”, Non-Proliferation Papers no. 52, (EU Non-Proliferation Consortium, November 2016), <https://www.sipri.org/sites/default/files/Increasing-transparency-in-biodefence.pdf>.

## VI. Results

Regarding substantive findings, in a working paper submitted to the Eighth BWC Review Conference by Germany, it was indicated that participants concluded they had been given valuable insight into the facility's activities. They acknowledged that the host's cooperation had helped to promote transparency and confidence in the implementation of the BWC and provided reassurance that the facility's activities were consistent with German obligations under Article I of the Convention.<sup>51</sup>

In regard to the process, a summary of the report included in the working paper further suggested that the exercise had convinced participants that compliance visits could be an appropriate means of increasing transparency and demonstrating a facility's compliance with the BWC as well as providing "a useful platform for the exchange of good practices amongst all participants".<sup>52</sup> The report further pointed to some ideas for improvement, including suggestions for the planning and methodology that could be used in a compliance assessment of a military facility.

The working paper concluded with language proposed for inclusion in the additional understandings under Articles IV and V of the final document of the Eighth BWC Review Conference, including references to the importance of PREs for improving national implementation, stimulating international cooperation and improving confidence in compliance.<sup>53</sup>

## D. Morocco

### I. Duration and location

The Moroccan Ministry of Health, in collaboration with the Ministry of Foreign Affairs and International Cooperation, organized the fourth PRE, which was the first conducted outside Europe. It took place on 9–11 May 2017 in Morocco and included visits to bio-related facilities in Rabat and Casablanca.

### II. Objectives

The objective of the Moroccan PRE, as stipulated in a Moroccan working paper, was:

*to broaden support for the European Union promoted peer review mechanism concept, which has the following objectives: to strengthen national implementation of the BWC; to improve confidence in compliance by increased transparency; and to deepen international cooperation.*<sup>54</sup>

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51 Germany, [BWC/CONF.VIII/WP.11](#), p. 5.

52 Ibid, p. 5.

53 Germany, "Peer review visit exercise at the Bundeswehr Institute of Microbiology in Munich, Germany: civil society observer report", BWC/CONF.VIII/WP.29, 9 November 2016, <https://undocs.org/BWC/CONF.VIII/WP.29>.

54 Morocco, "Peer review exercise on the national implementation of the Biological Weapons Convention (Morocco 9–11 May 2017)", BWC/MSP/2017/WP.1, 8 November 2017, p. 2, <https://undocs.org/BWC/MSP/2017/WP.1>.

### III. Focus

This PRE focused on biosafety and biosecurity, particularly the biorisk and pathogen management measures adopted by Morocco. Five visits to bio-related institutions were included to facilitate experts' understandings of how the mechanisms were operationalized in practice in different institutions, allowing for recommendations on how to improve these aspects of the implementation of the BWC.<sup>55</sup>

### IV. Stakeholders

Approximately 60 experts participated in this event, including national experts from the Ministry of Foreign Affairs, the Ministry of Health, the Ministry of Interior, the Ministry of Foreign Trade, the National Defence, the Gendarmerie Royale, the Ministry of Higher Education, the Ministry of Agriculture, and two Moroccan biosafety associations: the Moroccan Biosafety Association and the Moroccan Biosafety, Biosecurity and Sanitary Security Association.

The event also included the participation of 16 international experts from 10 countries (Belgium, China, France, Gabon, Germany, the Kingdom of the Netherlands, Saudi Arabia, Spain, the United Arab Emirates and the United States) and one international entity, the BWC ISU.<sup>56</sup>

The exercise was organized with financial support provided by the European Union and wider support from Belgium, France and the Kingdom of the Netherlands.

### V. Process

This exercise was designed to cover a wide range of topics related to the national implementation of the BWC in Morocco. The activities included a day of seminars and presentations related to, inter alia, the Moroccan implementation of the BWC, the national system for detection and handling of pathogens, and disease surveillance and export control measures.<sup>57</sup> This was followed by two days of visits to institutions in Rabat and Casablanca that were designed to provide “first-hand, practical insights” into the implementation of such measures in Morocco. The institutions visited were:

- The National Institute for Safety of Food Products, in Rabat
- The animal vaccine production facility of the company Biopharma, in Rabat
- The Moulay Youssef Hospital, in Casablanca
- The National Institute of Hygiene, in Rabat
- The Pasteur Institute of Morocco, in Casablanca

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55 Ibid.

56 Ibid. Appendixes I and II contain detailed information about the national and international participants.

57 Ibid, p. 2.

## VI. Results

The results from the Moroccan PRE were presented in a working paper submitted by Morocco in 2017. The working paper outlined extensive positive feedback from international experts, noting the ambitious breadth and smooth running of the exercise, the “exemplary level of transparency” and the “very useful” contribution of civil society experts. It was stated that:

*[the] presentations not only informed participants about mechanisms and procedures already in place, but also highlighted elements currently missing in Morocco’s implementation...[and] enabled the generation of recommendations for enhanced national implementation and provided suggestions for areas of deepened international cooperation.*<sup>58</sup>

Among such recommendations identified by international experts, the working paper included suggestions related to legislation (specifically, drafting a list of dangerous materials and establishing an interministerial structure), the development of a national programme for BWC implementation, and the establishment of a BWC awareness-raising campaign.<sup>59</sup>

The paper concludes with some overall impressions of the peer review approach, noting that the exercise “contributed towards establishing this approach as an accepted standard under the BWC that is highly valuable to BWC States Parties”.<sup>60</sup>

Finally, on 10-11 May 2018 in Rabat, the National Institute of Hygiene together with the Department of State of the United States of America organized a seminar in order to develop an action plan to implement the recommendations agreed during the PRE.<sup>61</sup>

## E. Georgia

### I. Duration and location

Georgia organized the fifth PRE, which took place on 14–15 November 2018 at the Richard Lugar Center for Public Health Research of the National Center for Disease Control and Public Health (NCDC) in Tbilisi.

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58 Morocco, BWC/MSP/2017/WP.1, p. 3.

59 Ibid, p. 4.

60 Ibid.

61 Morocco, “Séminaire sur la mise en œuvre de la Convention sur l’Interdiction des Armes Biologiques et à Toxines (Rabat, 10 et 11 Mai 2018)”, BWC/MSP/2018/MX.3/WP.5, 3 August 2018, <https://undocs.org/BWC/MSP/2018/WP.5>.

## II. Objectives

The BWC working paper summarizing the exercise states that:

*The primary objective of this visit was to demonstrate that the Richard Lugar Center for Public Health Research of the National Center for Disease Control and Public Health complies with the provisions and obligations of the BTWC and that its activities are fully in line with stated peaceful purposes and the information provided in the relevant Confidence Building Measures (CBM) form.*<sup>62</sup>

The working paper further noted that it hoped the opening up of the facility to scrutiny would “encourage other States Parties to conduct similar visits”.<sup>63</sup>

## III. Focus

The Georgian PRE was focused on one biological research facility’s compliance with the BWC and included a BSL-3 laboratory. The exercise included the assessment of all aspects of the facility relevant to the BWC.

## IV. Stakeholders

Georgian experts from the NCDC, the Ministry of Health and the Ministry of Foreign Affairs participated on behalf of the host country.

Following an open call in early 2018 to participate in the PRE, 19 experts were selected from the following states parties: Austria, Bosnia and Herzegovina, Cameroon, Chile, Colombia, Germany, Hungary, Iraq, Italy, Kazakhstan, Malaysia, Mali, Montenegro, Myanmar, Uganda, the United Kingdom and the United States. In addition, three observers from the European External Action Service, the BWC ISU and King’s College London were present at the exercise.<sup>64</sup>

Financial support for this exercise was provided by the German Federal Foreign Office.

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62 Georgia and Germany, “Building confidence through transparency: peer review transparency visit at the Richard Lugar Center for Public Health Research of the National Center for Disease Control and Public Health in Tbilisi, Georgia”, BWC/MSP/2018/WP.5, 3 December 2018, p. 2, <https://undocs.org/BWC/MSP/2018/WP.5>.

63 Ibid, p. 2.

64 Ibid, pp. 2–3.



## V. Process

The two-day exercise was “preceded by a welcome ceremony and a briefing on the NCDC’s mission and research activities”. During the first day, participants were split into two equally sized teams, which each undertook a tour of the facility. On the second day:

*four experts received the stipulated security briefings and entered the BSL-3 laboratory, while the rest of the group examined the facility’s premises and surrounding buildings, such as warehouses and an administrative complex.*<sup>65</sup>

Over the course of the two days, the participating experts were permitted to undertake the following activities: “Examination of laboratories, other rooms, laboratory equipment and installations; requests for visual access to paper documents; interviewing of personnel; and requests for photographs and the determination of geographical coordinates.”<sup>66</sup> All the participants were escorted during the visit.

The exercise concluded with a closing session that comprised “discussions, a summary, and a final assessment”.<sup>67</sup>

## VI. Results

A BWC working paper submitted to the 2018 Meeting of States Parties to the BWC by Georgia and Germany (and co-sponsored by several other states parties) presented the results of the exercise.

In terms of the substantive findings, the report from the international visiting team was annexed to the working paper. It stated that the “facility demonstrated significant transparency about its activities. The visiting team observed nothing that was inconsistent with prophylactic, protective and other peaceful purposes.”

The working paper also included a general conclusion about the PRE as an instrument, mentioning that:

*[the] on-site visit demonstrated once more that it is possible to reconcile a high level of transparency with the legitimate security and intellectual property interests of the visited facility. It is thus expected that voluntary transparency initiatives will continue to advance the ongoing search for innovative and concrete ways to increase confidence in the implementation of the BTWC in the absence of any verification procedures.*<sup>70</sup>

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65 Ibid, p. 2.

66 Ibid, p. 2.

67 Ibid, p. 2.

68 Ibid, pp. 5–6.

69 Ibid.

70 Ibid, p. 2.

## **F. Kyrgyzstan**

### **I. Duration and location**

The last PRE organized to date was undertaken by Kyrgyzstan between 2021 and 2022. The preparatory work started with a series of virtual and in-person meetings in Geneva. Then months later, the exercise was held in Issyk Kul on 16–18 August 2022.

### **II. Objectives**

The exercise’s overall objective, as laid out in a Kyrgyz working paper, “was to strengthen national implementation of the Biological Weapons Convention (BWC) and enhance international co-operation on related matters”.<sup>71</sup>

### **III. Focus**

The exercise was structured around three specific goals: first, to “review and further develop the national legal framework for BWC implementation and related matters, including the draft biosafety law currently being developed”; second, to “exchange best practices on the development and implementation of a comprehensive national approach to biosafety and biosecurity”; third, to “identify opportunities for international cooperation and assistance in the framework of the BWC”.<sup>72</sup>

### **IV. Stakeholders**

Twenty-eight representatives from several Kyrgyz ministries or other bodies participated in the PRE, including the following: the Ministry of Economy and Commerce, the Ministry of Health, the Ministry of Emergency Situations, the Ministry of Defence, the State Committee on National Security, the State Customs Service, the General Staff of Armed Forces, the Ministry of Agriculture, the Public Health Institute, and the Center for Non-proliferation and Export Control.<sup>73</sup>

In addition, representatives from the following five states parties participated: Georgia, Kazakhstan, Mongolia, the United States and Uzbekistan.

Experts from various international or regional organizations also participated, representing the following institutions: the BWC ISU; the Organization for Security and Co-operation in Europe’s Programme Office in Bishkek; the United Nations Office for Disarmament Affairs’ Regional Coordinator for United Nations

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71 Kyrgyz Republic, “Efforts of the Kyrgyz Republic in enhancing implementation of the Biological Weapons Convention: peer review exercise under EU Council Decision 2019/97 in support of the Biological Weapons Convention”, BWC/CONF.IX/WP.52, 13 December 2022, <https://undocs.org/en/BWC/CONF.IX/WP.52>.

72 Ibid.

73 Ibid, p. 1.

Security Council resolution 1540 (2004) for Asia; the United Nations Regional Centre for Peace and Disarmament in Asia and the Pacific; the Delegation of the European Union to the Kyrgyz Republic; the European Union Chemical, Biological, Radiological and Nuclear Centres of Excellence Regional Secretariat for Central Asia; the World Organisation for Animal Health; and the International Science and Technology Center. This exercise was organized with the financial support of the European Union.<sup>74</sup>

## V. Process

This PRE included an extensive preparatory phase that took place in Geneva.<sup>75</sup> In this phase, the Kyrgyz authorities, together with representatives from the BWC ISU and other organizations, held in-person and virtual meetings in which they revisited the experiences of previous exercises and discussed several options for the Kyrgyz exercise. These discussions included the goals and objectives of the exercise, the selection of best practices to share, the facility to visit, the relevant Kyrgyz policy documents and the possible participants.<sup>76</sup>

The second phase consisted of the actual peer review in Kyrgyzstan. This phase involved the sharing of documentation and presentations describing the country's situation, followed by an exchange among participants attending the meeting and a wrap up session outlining the findings and identifying good practices.

## VI. Results

The Kyrgyz working paper lays out a number of substantive results emerging from the exercise, including the following points:

*This event helped identify good practices and recommendations for the review and finalization of biosecurity legislation. The importance of combining legal provisions to create a comprehensive scope of application of the law, consistent with the BWC and other relevant international instruments, was particularly emphasised... A very important activity was mapping the different institutions' responsibilities, which resulted in the identification of how to enhance inter-institutional coordination formally.<sup>77</sup>*

The exercise helped to further identify areas in which assistance was required and facilitated preparations for an official assistance request under the framework of Article X.<sup>78</sup> The working paper did not include further general considerations from the organizers or participants on the role of VTIs or PREs as a tool for the BWC.

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74 European Union, Council Decision (CFSP) 2019/97, 21 January 2019, *Official Journal of the European Union*, <https://eur-lex.europa.eu/eli/dec/2019/97>.

75 Kyrgyz Republic, "Meeting summary: peer review exercise under EU Council decision 2019/97 in support of the Biological Weapons Convention – preparatory meeting on the conduct of a BWC peer review exercise in the Kyrgyz Republic, International Conference Center Geneva, 12–14 October 2021", pp. 1–2.

76 Kyrgyz Republic, "Peer review exercise under EU Council Decision 2019/97 in support of the Biological Weapons Convention (BWC)", preparatory meeting concept note.

77 Kyrgyz Republic, BWC/CONF.IX/WP.52, p. 2.

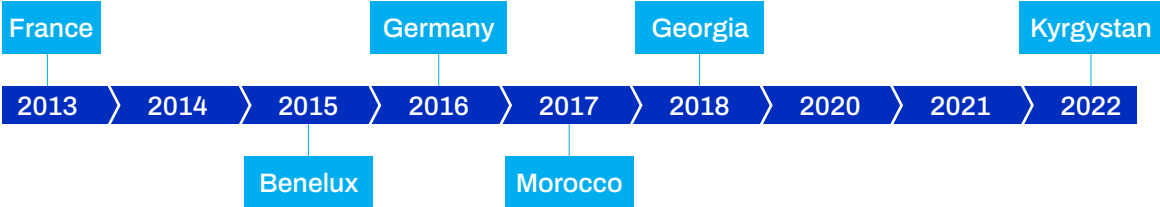
78 Ibid.

# 4 Analysis of key elements of peer review exercises

This section provides an analysis and comparison of the key elements of the PREs that have taken place so far.

The **frequency** of the exercises was relatively stable. Since the first PRE in 2013, one exercise was held each year until 2018, and the last exercise took place in 2022, after the COVID-19 pandemic (Figure 1).

Figure 1. Timeline of peer review exercises



The **duration** of most of the in-person segments of these PRE was three days. However, these exercises likely required significant preparations. Certainly the Benelux exercise took place over a period of six months, including a document exchange phase as well as in-person meetings; the Kyrgyz exercise spanned ten months from the first preparatory meeting in Geneva in 2021 to the conclusion of the meeting in Issyk Kul in 2022.

Another element that can be considered is the **participants**. The identification or selection of participants was led by the organizers in all cases. The Georgian PRE recruited participants through an open call to participate. However, in other cases, it is not always clear how participating peers were selected.

Overall, **43 states parties** participated in the PREs. Most of these states took part once or twice in PREs organized by other states parties, except for the United States, which participated in five, and Germany and the United Kingdom, both of which participated in three. Kyrgyzstan and Luxembourg are the only states parties which organized a PRE but did not attend other exercises. Even though representatives from all five UN regional groups participated in the PREs, the states parties that tended to participate more were from the northern hemisphere.

Various **international or regional organizations** and other UN entities observed one or more PRE. The United Nations Office for Disarmament Affairs' BWC ISU attended the most exercises (Morocco, Georgia and Kyrgyzstan). Other institutions participated in only one exercise (most of them in Kyrgyzstan).<sup>79</sup>

**Civil society representatives** participated in four exercises, through the Fondation pour la Recherche Stratégique (France); the Center for Non-proliferation and Export Control (Kyrgyzstan); the Moroccan Biosafety Association and the Moroccan Biosafety, Biosecurity and Sanitary Security Association (Morocco); and King's College London (United Kingdom).

It is clear that issues across the BWC can be interconnected and overlap. Since the PREs lie under the overarching concept of VTIs, transparency as a concept is an underlying assumption when planning and organizing the exercises, as shown in the related working papers submitted to the BWC. More specific **objectives** of the exercises tend to involve strengthening national implementation, augmenting confidence in compliance and enhancing international cooperation.

The main **focus** of most exercises was the national biosafety and biosecurity regulatory system. Another prominent area of focus was providing transparency about the biological research activities undertaken in national facilities. Although most PREs were concerned with the national legislation and regulations that states parties had put in place to implement the BWC, two of the PREs were particularly focused on legislative review, and one was focused on export control measures. International cooperation was another area that was often referred to, but the PRE in Kyrgyzstan placed particular emphasis on this.

Table 3. Key focus areas of the peer review exercises

| KEY FOCUS AREA                       | FRANCE | BENELUX | GERMANY | MOROCCO | GEORGIA | KYRGYZSTAN |
|--------------------------------------|--------|---------|---------|---------|---------|------------|
| Biosafety and biosecurity            | ✓      | ✓       |         | ✓       |         | ✓          |
| Legislation review                   |        | ✓       |         |         |         | ✓          |
| Biological military defence research |        | ✓       | ✓       |         |         |            |
| Biological research                  |        |         |         |         | ✓       |            |
| International cooperation            |        |         |         |         |         | ✓          |
| Export control                       | ✓      |         |         |         |         |            |

79 The other entities included: the European External Action Service, the Organization for Security and Co-operation in Europe's Programme Office in Bishkek, the United Nations Office for Disarmament Affairs' Regional Coordinator for United Nations Security Council resolution 1540 (2004) for Asia, the United Nations Regional Centre for Peace and Disarmament in Asia and the Pacific, the European Union Chemical, Biological, Radiological and Nuclear Centres of Excellence Regional Secretariat for Central Asia, the World Organisation for Animal Health and the International Science and Technology Center.

# 5 Discussion and criticism concerning peer review exercises

The reports and presentations on the different PREs done in the context of the BWC by organizing states parties have largely been positive, in terms of both the substantive findings of the exercises and the experience with the process itself. This is further reflected in statements to BWC meetings by states parties whose officials participated in these exercises.

However, discussions at BWC meetings have produced a mixed response, with some states parties criticizing the concepts of PRE and VTI. These different positions are reflected in, among other documents, the Chairpersons' summary reports of the Meetings of Experts on Institutional Strengthening of the Convention, where these issues were discussed during the 2017–2020 intersessional programme. For example, in 2019 the Chairperson remarked that:

*A number of States Parties highlighted the benefit of other potential means to foster transparency, cooperation and national implementation such as voluntary peer review exercises, voluntary visits or other transparency initiatives. Other States Parties underlined that peer reviews are not formal mechanisms within the Convention, cautioned about the utility of peer review exercises and noted that such initiatives would in their view not strengthen the Convention.*<sup>80</sup>

Criticism of these initiatives is largely oriented along two lines. For some states parties, they provide a **false sense of assurance**, in part because of their **voluntary nature**.<sup>81</sup> For example, Cuba has expressed scepticism over the value of peer review as “an instrument for assessing the implementation of the Convention given their completely voluntary nature”.<sup>82</sup> Furthermore, the Islamic Republic of Iran stated that “There are serious difficulties with such concepts in the framework of the BWC including inter alia that they may create a false sense of assurance regarding the national implementation of obligations arising from the Convention”.<sup>83</sup> In addition, the Russian Federation has queried the

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80 Report of the 2019 Meeting of Experts on Institutional Strengthening of the Convention, BWC/MSP/2019/MX.5/2, 4 October 2019, <https://undocs.org/BWC/MSP/2019/MX.5/2>.

81 Report of the 2018 Meeting of Experts on Institutional Strengthening of the Convention, BWC/MSP/2018/MX.5/3, 8 November 2018, <https://undocs.org/BWC/MSP/2018/MX.5/3>.

82 Cuban intervention at the BWC 2nd Preparatory Committee, 5 April 2022, 10:00h, UNOG Digital Recordings Portal, [https://conf.unog.ch/digitalrecordings/en?guid=public/61.0321/0440B32C-87DE-482D-9459-D165236ECCD8\\_10h34&position=4970&channel=ENGLISH](https://conf.unog.ch/digitalrecordings/en?guid=public/61.0321/0440B32C-87DE-482D-9459-D165236ECCD8_10h34&position=4970&channel=ENGLISH).

83 Report of the Meeting of Experts, BWC/MSP/2013/MX/3, p. 33.

usefulness of peer review mechanisms to increase transparency.<sup>84</sup> Moreover, in one case, a PRE resulted in the submission of a note verbale criticizing the procedure, objectives and achievements of the exercise and stating that it created “an illusion of legitimacy and transparency”.<sup>85</sup>

Similar sentiments emerge from scholarly research interviews around this topic. For example, a study undertaken by Johns Hopkins University suggested that “numerous interviewees discussed the value of peer review and voluntary site visits”, but notes that “One state party insisted that because host countries have full control of access to facilities, personnel, activities, and information, the assurance that voluntary activities provide is largely illusory”.<sup>86</sup>

Some states parties have also been critical of the value of voluntary measures in “the absence of a protocol including verification mechanisms”.<sup>87</sup> Moreover, some states have expressed concern that the organization of these activities could distract from work on a formal multilaterally negotiated verification mechanism.<sup>88</sup> China has stated that voluntary initiatives should contribute to “rather than hinder the eventual conclusion of a legally-binding verification protocol”,<sup>89</sup> which remains a priority for many state parties.

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84 Russian Federation. “Statement by the Representative of the Russian Delegation at the Meeting of States Parties to the 85 Biological and Toxin Weapons Convention (the BWC) on Paragraph 5 of the Agenda ‘General Debate’”, 3 December 2019, [https://unoda-documents-library.s3.amazonaws.com/Biological\\_Weapons\\_Convention\\_-\\_Meeting\\_of\\_States\\_Parties\\_\(2019\)/RF%2BStatement%2B.pdf](https://unoda-documents-library.s3.amazonaws.com/Biological_Weapons_Convention_-_Meeting_of_States_Parties_(2019)/RF%2BStatement%2B.pdf).

85 BWC Implementation Support Unit, “Note Verbale by the Permanent Mission of the Russian Federation to the United Nations Office and other International Organizations in Geneva (Ref. 3663, 10 October 2018)”, 11 October 2018.

86 Matthew P. Shearer et al., “BWC assurance: increasing certainty in BWC compliance”, *The Nonproliferation Review* 29, no. 1–3 (2022): 47–75, <https://doi.org/10.1080/10736700.2023.2178099>.

87 Venezuelan intervention at the BWC 2nd Preparatory Committee, 4 April 2022, 15:00h, UNOG Digital Recordings Portal, [https://conf.unog.ch/digitalrecordings/index.html?guid=public/61.0321/BE1E660B-C98F-4D9C-9937-0620B1510B-BE\\_15h05&position=3749&channel=ENGLISH](https://conf.unog.ch/digitalrecordings/index.html?guid=public/61.0321/BE1E660B-C98F-4D9C-9937-0620B1510B-BE_15h05&position=3749&channel=ENGLISH).

88 Richard Guthrie, “MX1 on cooperation and assistance: setting the scene” MX Report 1, 23 August 2021, BioWeapons Prevention Project, <https://www.cbw-events.org.uk/MX20-combined.pdf>.

89 China, “Reinforcing the mechanism of the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction”, BWC/CONF.IX/WP.33, 29 November 2022, <https://undocs.org/en/BWC/CONF.IX/WP.33>.

## 6 Reflections on benefits, limitations and opportunities

As this report has indicated, VTIs such as PREs applied in the context of the BWC are not a replacement for a verification mechanism or other formal mechanisms to assess compliance. However, these initiatives have stimulated interest and served as a flexible tool that can generate several benefits in circumstances where multilateral negotiation on a package of measures to strengthen the BWC was not possible.

First, PREs and other voluntary measures can **increase transparency** in selected areas, such as biosafety and biosecurity and the national regulatory framework, which are critical for sound implementation of the BWC in the twenty first century.

Second, these initiatives can play a role in **enhancing national implementation** through the identification of existing gaps in national systems, and enable discussion around opportunities for improvements. Furthermore, they can help raise awareness of implementation obligations and allow for the exchange of good practices and experiences among national and international experts.

Third, peer review-type initiatives can play a role in **building networks** of stakeholders involved in the implementation of the Convention, including, in some cases, non-governmental representatives. They present a unique opportunity to bring together different agencies of the government to discuss pertinent issues and for national representatives to collectively work on treaty implementation. Such discussions can increase awareness, understanding and communication on specific technical topics. Creating networks of experts from the host countries, as well as other international participants, that can act as guardians of compliance is a sustainable way of continuing to enforce the BWC.

Fourth, these initiatives offer a vehicle for **international cooperation and assistance**. Gaps identified during an exercise can be addressed by the organising states, but when necessary could also be translated into requests for cooperation and assistance under Article X of the Convention. Many states parties are already offering assistance to enhance biosecurity and strengthen the implementation of the BWC. Peer review could offer one route to better understand issues and optimise assistance activities to the specific needs of the recipient.

While there are, therefore, clear benefits to PREs, there are also limitations. As illustrated in this report, PREs are a **flexible** tool. Since each state party implements the BWC in accordance with its national circumstances and priorities, it is important to have an adaptable tool that can cover a range of possible requirements and be tailored to different contexts. However, the lack of a consolidated framework can also present a point of vulnerability – a concern that has been raised by some. Such is the diversity of peer review processes that there is a risk the term could become overstretched. Indeed, it is already difficult to assess peer review initiatives through a comparative analysis or standardized approach.



A related issue is that the organizing states largely **retain control** over the objectives, areas of focus, the participants, and the information revealed in a PRE. A bottom-up approach is important in generating ownership and ensuring the agenda of topics addresses the needs of those involved. However, it is also a limitation since it minimizes the extent to which a PRE, or indeed any flexible voluntary initiative of this sort, can provide assurance to all states parties.

To address these challenges, one option is for states parties to develop a series of templates of formats or agendas to address specific topics of interest. This could include setting the focus, process, objectives and the criteria for the information to be revealed, including through visits to facilities, for a geographically representative set of international expert observers. Such a step could further advance transparency as well as build an understanding of the advantages and disadvantages of such visits, which could assist in the ongoing activities of the Working Group on the Strengthening of the Convention. Ideally, states parties would work towards collectively agreeing to these templates. However, groups of like-minded states parties developing and using a set of templates could be a first step.

Finally, it is unclear from interviews and documentary research the extent to which PREs have **enduring value** in increasing transparency and enhancing national implementation. These mechanisms can provide a snapshot of a situation at any given time, and while a PRE can identify gaps and generate lessons to be learned, it is not always clear if or how gaps are subsequently filled and lessons absorbed. Therefore, in any future initiative there could be value to integrating methods in the project design phase to capture impact after the conclusion of the project.

This report has shown that PREs have mostly been a positive tool for those states parties involved and that they can be useful in the BWC context. The report has also discussed the concerns that other states parties have raised, along with some specific limitations of these instruments. Given that six exercises have been organized so far, each varying significantly, there could be value to further discussion and an exchange of “information and best practices on voluntary transparency exercises conducted by BTWC States parties”,<sup>90</sup> as proposed by a collective of states during the Ninth Review Conference in 2022. Such a discussion could also consider the lessons learned and address or mitigate any issues, should there be an interest to continue work in this area.

It is important to reiterate, though, that the organization of any VTI or PRE is *not* a substitute for a verification regime and should not replace existing CBMs or preclude any future mechanism to strengthen the Convention. However, as this report demonstrates, states parties that are interested in taking forward such initiatives can find in them a useful tool to strengthen the BWC and the wider biosecurity regime.

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90 Belgium, Canada, Chile, Czech Republic, France, Georgia, Germany, Luxembourg, Mexico, Morocco, Netherlands and Spain, “An exchange platform for voluntary transparency exercises”, BWC/CONF.IX/WP.21, 16 November 2022, <https://undocs.org/BWC/CONF.IX/WP.21>.



# Voluntary Transparency Initiatives: The Case of Peer Review Exercises in the Context of the BWC

MARÍA J. ESPONA

## Appendix: Matrix of past peer review exercises (PRE)

| LOCATION AND DATE  | MAIN OBJECTIVES   | FOCUS   | STAKEHOLDERS   | EXERCISE PROCESS  | RESULTS   |
|--|---|---|--|---|---|
| FRANCE<br>Paris and<br>Maisons-Alfort<br>4–6 December<br>2013 <sup>1</sup> | Provide proof of concept of the PRE proposal submitted by France. | The national biosafety and biosecurity system, including the national authorization and control system for manipulating dangerous pathogens.<br>The national export control system with a focus on the licensing procedures for dual-use biological materials and related equipment.<br>Awareness raising policy, including the courses, trainings and guidelines on biosafety and biosecurity implemented by different institutions. | National experts from: the Ministry of Foreign Affairs (Strategic Affairs and Disarmament Department), the French National Agency for Medicines and Health Products Safety (ANSM), the Ministry of Industrial Renewal, the Pasteur Institute of the Ministry of Health, the Animal Health Laboratory of the French Agency for Food, Environmental and Occupational Health and Safety (ANSES), the National Institute for Health and Medical Research (INSERM) and the French Military Health Service.<br>Other state party experts from: Canada, China, Germany, India, Mexico, Morocco, Switzerland, the United Kingdom and the United States.<br>National non-governmental experts from the Fondation pour la Recherche Stratégique (FRS). | Presentations by technical experts on the three areas of focus, followed by visits to two laboratories: first, the unit created by the French Ministry of Health at the Pasteur Institute to respond to specialized biological emergencies (Cellule d'Intervention Biologique d'Urgence – CIBU) in Paris; second, the ANSES Animal Health Laboratory in Maisons-Alfort. | The PRE was considered useful as a transparency tool that could strengthen confidence between the parties. The visits to laboratories were particularly useful.<br>It was considered useful to strengthen national implementation through identifying gaps and good practices, both for France and for other participating states.<br>Some indicated that it would be useful to expand the focus to other areas (e.g. response to alleged use and international cooperation), while others would have preferred a narrower focus.<br>It was proposed to make use of available tools under the BWC to share best practices and information identified in the PRE with all states parties.<br>Some participants were sceptical about how useful implementing a PRE through the BWC would be and indicated a preference for a more formal verification regime instead. |

<sup>1</sup> <https://undocs.org/BWC/MSP/2013/WP.8> <https://undocs.org/BWC/CONF.VII/WP.28> <https://undocs.org/BWC/MSP/2014/WP.3>

## Appendix: Matrix of past peer review exercises (PRE) continued

| LOCATION AND DATE   | MAIN OBJECTIVES   | FOCUS  | STAKEHOLDERS  | EXERCISE PROCESS  | RESULTS  |
|---|---|--|---|---|--|
| BELGIUM<br>LUXEMBOURG<br>and the<br>NETHER-<br>LANDS<br><br>Brussels,<br>Dudelange,<br>Esch-Sur<br>Alzette,<br>Rijswijk,<br>Bilthoven<br><br>June to<br>November<br>2015 <sup>2</sup> | Improve the implementation of the Convention at the national level through the review of elements of national implementation and the sharing of best practices.<br><br>Contribute to building confidence between states parties.<br><br>Raising awareness of BWC among national stakeholders, encouraging participation in relevant inter-agency initiatives.<br><br>Contribute to discussion at the Eighth BWC Review Conference by presenting the PRE experience.<br><br>Enable feedback on CBMs and increasing their role as a declaration tool within the Convention. | National biological military research and development programmes and research centres and laboratories (as declared in CBM Form A).<br><br>National legislation, regulations, and other measures related to BWC implementation (as declared in CBM Form E), focusing on national oversight of biosafety and biosecurity. | National experts from the departments of defence, public health, and foreign affairs of the three states parties. | Written phase in which experts from each country assessed Forms A and E of one another's 2015 CBMs.<br><br>In-person phase in each state party that included a meeting to clarify points on the shared CBM forms and visits to the following relevant facilities declared in the Form A: <ul style="list-style-type: none"> <li>The Centre for Applied Molecular Technologies of the Defence Laboratory Department in Brussels, Belgium, on 9 November.</li> <li>The Health National Laboratory in Dudelange, and the Institute of Health in Esch-Sur Alzette, Luxembourg, on 17 November.</li> <li>The Organisation for Applied Scientific Research in Rijswijk and the National Institute of Public Health and the Environment in Bilthoven, the Kingdom of the Netherlands, on 27 November.</li> </ul> | The PRE format (written phase followed by in-country visits) was found useful in improving national implementation, increasing international cooperation and raising awareness of the BWC among national stakeholders.<br><br>Participants indicated that the process provided in-depth feedback on CBMs, improving the accessibility and relevance of the CBMs of the participating countries.<br><br>Participants identified the value of organizing a preparatory meeting ahead of the in-person visit to increase its effectiveness. |

<sup>2</sup> <https://undocs.org/BWC/MSP/2015/WP.12> <https://undocs.org/BWC/MSP/2015/MX/WP.13/Rev.1>

## Appendix: Matrix of past peer review exercises (PRE) continued

| LOCATION AND DATE                                 | MAIN OBJECTIVES  | FOCUS  | STAKEHOLDERS  | EXERCISE PROCESS  | RESULTS  |
|---|--|--|---|---|--|
| GERMANY<br>Munich<br>2–4 August 2016 <sup>3</sup> | <p>Test whether a peer review visit could serve as a tool to increase transparency with regard to research and development activities.</p> <p>Contribute to the relevance and value of the peer review concept.</p> <p>Share best practices, discuss national implementation systems, raise awareness and establish contacts that could serve to increase international cooperation.</p> | <p>Compliance assessment of a military facility, including among other things: laboratory activities and equipment, infrastructure, security measures, laboratory conduct, documentation in relation to research and development, as well as procedures for the transfer and export of pathogens and toxins.</p> | <p>National experts from: the Federal Foreign Office, the Ministry of Defence, the Bundeswehr Verification Centre, the Bundeswehr Institute of Microbiology and the German Partnership Programme for Excellence in Biological and Health Security.</p> <p>Other state party experts and civil society experts from: Algeria, Austria, Belgium, Burundi, France, Georgia, Indonesia, Jordan, Lithuania, Myanmar, the Kingdom of the Netherlands, Nigeria, Norway, Poland, Portugal, Saudi Arabia, Switzerland, Uganda, the United Kingdom the United States and Yemen.</p> | <p>Visit to a military research facility declared in the German CBM Form A, part 2 (iii): the Bundeswehr Institute of Microbiology in Munich.</p> <p>Participants were organized in two groups:</p> <ul style="list-style-type: none"> <li>• Visiting team: four biology experts and six observers participated in a pre-visit briefing and a tour of the facility.</li> <li>• Monitoring team: ten participants monitored the exercise and attended presentations about legal and policy matters, biosecurity and biosafety.</li> </ul> <p>The visiting team prepared a summary report in collaboration with the monitoring team and the facility staff. The report was discussed between the participants in the final session.</p> | <p>The report highlighted that the objectives of the exercise were met.</p> <p>It was considered that visits could be an appropriate means of increasing transparency and demonstrating a facility's compliance with the BWC.</p> <p>Visits were also considered useful for the exchange of good practices among all participants.</p> <p>The report included suggestions for the planning and methodology that could be used in a compliance assessment of a military facility.</p> |

<sup>3</sup> <https://undocs.org/BWC/CONF.VIII/WP.11> <https://undocs.org/BWC/CONF.VIII/WP.29> Filippa Lentzos, "Increasing transparency in biodefense: a 2016 visit to a German military medical biodefense facility", Non-Proliferation Papers no. 52, (EU Non-Proliferation Consortium, November 2016).

## Appendix: Matrix of past peer review exercises (PRE) continued

| LOCATION AND DATE   | MAIN OBJECTIVES  | FOCUS   | STAKEHOLDERS  | EXERCISE PROCESS   | RESULTS  |
|---|--|---|---|--|--|
| MOROCCO<br>Rabat and Casablanca<br>9–11 May 2017 <sup>4</sup> | To strengthen national implementation of the BWC; to improve confidence in compliance by increased transparency; and to deepen international cooperation.<br><br>A further overarching objective was to broaden support for the peer review mechanism concept. | Biosafety, biosecurity, biorisk and pathogen management measures. | National experts from: the Ministry of Foreign Affairs, the Ministry of Health, the Ministry of Interior, the Ministry of Foreign Trade, the National Defence, the Gendarmerie Royale, the Ministry of Higher Education, and the Ministry of Agriculture.<br><br>Other state party experts from: Belgium, China, France, Gabon, Germany, the Kingdom of the Netherlands, Saudi Arabia, Spain, the United Arab Emirates and the United States.<br><br>National non-governmental experts from two biosafety associations: the Moroccan Biosafety Association and the Moroccan Biosafety, Biosecurity and Sanitary Security Association.<br><br>One representative from the BWC implementation Support Unit. | One day of seminars and presentations on, inter alia, the Moroccan implementation of the BWC, the national system for detection and handling of pathogens, and disease surveillance and export control measures.<br><br>Two days of visits to five institutions: <ul style="list-style-type: none"> <li>National Institute for Safety of Food Products, in Rabat</li> <li>Animal vaccine production facility of the company Biopharma, in Rabat</li> <li>Moulay Youssef Hospital, in Casablanca</li> <li>National Institute of Hygiene, in Rabat</li> <li>Pasteur Institute of Morocco, in Casablanca</li> </ul> <p>The following year a seminar was organized to develop an action plan to implement the recommendations agreed during the PRE.</p> | Presentations on both existing measures and gaps in national implementation were found to be helpful for experts to generate recommendations.<br><br>The contributions of civil society experts were recognised as useful.<br><br>The PRE generated recommendations for Morocco regarding legislation, the development of a national program for BWC implementation and a BWC awareness-raising campaign. Notably, a follow-up seminar was organized to implement these recommendations. |

<sup>4</sup> <https://undocs.org/BWC/MSP/2017/WP.1>

## Appendix: Matrix of past peer review exercises (PRE) continued


| LOCATION AND DATE  | MAIN OBJECTIVES  | FOCUS  | STAKEHOLDERS   | EXERCISE PROCESS  | RESULTS   |
|--|--|--|--|---|---|
| GEORGIA<br>Tbilisi<br>14–15<br>November<br>2018 <sup>5</sup> | Demonstrate that the Richard Lugar Center for Public Health Research complies with the provisions and obligations of the BWC, and that the activities taking place have peaceful purposes and are consistent with the information provided in the relevant CBM form. | Biological research activities and other relevant aspects of the Richard Lugar Center, including its biological safety level 3 laboratory. | National experts from: the Richard Lugar Center for Public Health Research of the National Center for Disease Control and Public Health, the Ministry of Health and the Ministry of Foreign Affairs.<br><br>Other state party experts from: Austria, Bosnia and Herzegovina, Cameroon, Chile, Colombia, Germany, Hungary, Iraq, Italy, Kazakhstan, Malaysia, Mali, Montenegro, Myanmar, Uganda, the United Kingdom and the United States.<br><br>Observers from the European External Action Service and the BWC Implementation Support Unit.<br><br>One observer from a non-governmental organization, King's College London. | During the first day, participants were split into two equally sized teams, which each undertook a tour of the facility and discussed research activities.<br><br>On the second day, four participants entered the Biosafety Level 3 laboratory, while others examined the facility premises.<br><br>At the closing session, participants undertook a final assessment of the exercise. A report was drafted by the international visiting team's leader. | The participants concluded that on-site visits can reconcile a high level of transparency with the legitimate security and intellectual property interests of the visited facility. |

<sup>5</sup> <https://undocs.org/BWC/MSP/2018/WP.5> <https://undocs.org/BWC/MSP/2018/MX.3/WP.2>

## Appendix: Matrix of past peer review exercises (PRE) continued

| LOCATION AND DATE  | MAIN OBJECTIVES   | FOCUS  | STAKEHOLDERS   | EXERCISE PROCESS  | RESULTS   |
|--|---|--|--|---|---|
| KYRGYZSTAN<br>Issyk Kul<br>16–18 August 2022<br><br>Preparatory work: Geneva, Switzerland, 12–14 October 2021 <sup>6</sup> | Strengthen national implementation.<br>Enhance international cooperation. | National legal framework and related matters, including the draft biosafety law under development.<br><br>A comprehensive national approach to biosafety and biosecurity.<br><br>Opportunities for international cooperation and assistance. | National experts from: the Ministry of Economy and Commerce, the Ministry of Health, the Ministry of Emergency Situations, the Ministry of Defence, the State Committee on National Security, the State Customs Service, the General Staff of Armed Forces, the Ministry of Agriculture, the Public Health Institute and the Center for Non-proliferation and Export Control.<br><br>Other state party experts from: Georgia, Kazakhstan, Mongolia, the United States and Uzbekistan.<br><br>Observers from eight international and regional organizations, including the BWC Implementation Support Unit. | Preparatory phase that included in-person and virtual meetings in Geneva, Switzerland, 12–14 October 2021.<br><br>Exercise in Kyrgyzstan that included presenting the country's situation and discussions.<br><br>A visit to the Cholpon-Ata city laboratory was planned but didn't take place. | The exercise helped identify good practices and recommendations for the review and finalization of the biosecurity legislation.<br><br>The mapping the different institutions' responsibilities resulted in the identification of how to enhance inter-institutional coordination formally.<br><br>The exercise helped to identify in which specific areas assistance is required and how to prepare the official request in the framework of Article X of the BWC. |

<sup>6</sup> <https://undocs.org/BWC/CONF.IX/WP.52> Kyrgyz Republic, "Meeting summary: peer review exercise under EU Council decision 2019/97 in support of the Biological Weapons Convention – preparatory meeting on the conduct of a BWC peer review exercise in the Kyrgyz Republic, International conference Center Geneva, 12–14 October 2021", pp. 1–2.

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