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

9 November 2016

English only

Geneva, 7-25 November 2016

Agenda item 11

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

**Peer review visit exercise at the Bundeswehr Institute of
Microbiology in Munich, Germany: Civil society observer
report**

Submitted by Germany

1. In 2016 Germany invited BWC states parties to visit its main military medical biodefence facility to evaluate its compliance with BWC obligations. During the peer review exercise, Germany described its biodefence activities and the related laws, regulations and practices that are in place to ensure that the activities are carried out safely, securely, responsibly and in line with the requirements of the BWC. Visitors were shown the laboratories and equipment, and engaged in constructive dialogue with facility staff.
2. The visitors concluded they had been given valuable insight into the activities of the facility. They acknowledged that the hosts' cooperation had helped to promote transparency and confidence with regards to the BWC and provided reassurance that the facility's activities are within the permitted prophylactic, protective and other peaceful purposes of Article I of the BWC.
3. The following report is authored by Dr. Filippa Lentzos of King's College London, the civil society representative invited to take part alongside the 20 state party representatives, and includes her assessment of the on-site visit.

**Increasing transparency in biodefence: A 2016 visit to a
German military medical biodefence facility**

I. Introduction

4. The 1972 Biological and Toxin Weapons Convention (BWC) prohibits the development, production, stockpiling and acquisition of biological weapons, while permitting work with biological agents in types and quantities appropriate for prophylactic, protective or other peaceful purposes. The line between permitted and non-permitted (i.e.

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illegal) activities and programmes is often blurred in the area of biodefence, where the potential is greatest for permitted activities to cross the line, inadvertently or intentionally, into prohibited activities. States with biodefence programmes, therefore, have a special responsibility to demonstrate that their programmes are not used as a cover for offensive programmes, and that their programmes are not *perceived* as such. It is particularly important to proactively counter the perception that a biodefence programme may be used to disguise an offensive programme, or elements of an offensive programme, because such a perception may provide other states with justification for initiating or continuing their own offensive biological warfare programme.

5. Unusually for an arms control treaty, however, the BWC was agreed without including routine on-site verification mechanisms to enhance assurance of compliance. Efforts to introduce a legally binding verification mechanism for the BWC have failed in the past, and developments in the political, security and scientific contexts are making it increasingly clear that a fully effective verification system, or absolute certainty on full compliance with the BWC, is exceptionally difficult. Yet, this does not mean that it is impossible for states to be assured other countries are abiding by their treaty obligations. There are a number of actions and activities that cumulatively may give a reasonable indication of a state party's intent and compliance status over time.

6. Paramount for states with biodefence programmes is transparency. Most states with biodefence programmes recognize their special responsibility to ensure high standards of transparency. They submit information about their programmes as required under the confidence-building measures (CBMs) of the BWC to reassure other states that their activities are solely for peaceful purposes. These CBM returns describe relevant activities, facilities, unusual outbreaks of disease and the national regulatory framework implementing the BWC. Through complete, accurate and annual submissions, the CBMs enable national patterns of normal activity to be established, and this makes a significant contribution to a compliance judgment.

II. Strengthening compliance assessments

7. To maximize their transparency, an increasing number of states are now also making their CBM submissions publicly available and open to civil society. Eighteen states with biodefence programmes made their CBM returns public in 2016. Recently, a small number of states have voluntarily gone further in their efforts to be transparent and to allay any potential suspicions about the status of their biodefence programmes.

8. For example, Canada—in the lead-up to the Seventh Review Conference in 2011—proposed a BWC 'compliance assessment' initiative. The initiative approached the concept of compliance verification from the broad perspective of examining national implementation programmes rather than from the more traditional and focused perspective of inspecting facilities. It sought to demonstrate that options to evaluate compliance and implementation of the treaty exist outside of a legally binding verification mechanism for the BWC. Thus, Canada put itself forward to act as a test case and made an initial compliance assessment submission in the form of a working paper to the 2012 BWC meeting. The submission provided more in-depth reporting on national implementation as well as efforts to administer and enforce those implementation measures in an effort to supplement and add to the information Canada provides through its annual CBM submissions and its quinquennial review conference compliance reports. Other interested states were invited to join in the initiative, and Switzerland, the Czech Republic and France all made working paper submissions to recent BWC meetings.

9. Another informal, but more interactive, arrangement has been put forward by France. Here, participating states physically come together to make mutual assessments of national implementation standards based on common understandings reached during the intersessional process. Like the ‘compliance assessment’ submissions, the ‘peer review’ mechanism is also aimed at building confidence and providing transparency between states. However, it is additionally aimed at improving national implementation and, importantly, sharing experiences and best practices among experts. France organized the first peer review exercise in 2013. National experts from nine states parties were given presentations on French biosafety and biosecurity measures, export controls, and awareness-raising policy. The information provided in the presentations was then illustrated through on-site visits to two civilian laboratories in France. Building on this, Belgium, Luxembourg and the Netherlands conducted a Benelux peer review exercise among themselves in 2015. This exercise consisted of two phases: a first phase during which written consultations took place between the three states; and a second phase during which each individual Benelux-country organized an event and hosted visiting peers from the other two states for a review through presentations and on-site visits.

10. A third informal arrangement, labelled ‘implementation review’, mixed elements from both ‘compliance assessment’ and ‘peer review’ and was carried out by Canada, Chile, Ghana, Mexico and the United States in 2016. For the ‘implementation review’, all parties developed an agreed format to report on key areas of national implementation, including prohibitions and their enforcement, biosafety and biosecurity, export licensing, and oversight, education and outreach efforts intended to complement these. National reports were then exchanged, followed by visits to each capital for in-depth conversations on laws, regulations and implementation in practice.

11. To focus compliance assessment more specifically on biodefence, military activities and on-site visits, Germany organized what it described as a ‘peer review compliance visit exercise’ in 2016. This was part of the country’s long-standing efforts to pragmatically and incrementally strengthen the BWC in order to contribute to the longer-term national and European Union (EU) objective of strengthening treaty compliance and verification capacities. In May 2016, the German Federal Foreign Office (MFA) circulated messages to all designated national points of contact, to the foreign ministries of states parties that have not provided a national contact point, to permanent missions in Geneva and to the BWC Implementation Support Unit (ISU) inviting them to the exercise. The German Ministry of Defence (MOD) was to open the Bundeswehr Institute of Microbiology in Munich, Germany, on 2–4 August 2016, to 10 bio-experts and up to 10 additional participants monitoring the visit. This exercise was a joint project organized by the German MFA and the MOD (the latter being represented by the Bundeswehr Institute of Microbiology and the Federal Armed Forces Verification Centre).

12. The stated objective of the exercise was to demonstrate to the visiting bio-experts that the facility complies with the provisions and obligations of the BWC. The experts would be asked to evaluate the information gained during the visit and to develop a compliance assessment report. I was invited to represent civil society and to act as an independent scientific observer.

III. Observer reflections

13. In terms of my observations, it seemed clear that the key objectives of the exercise had been met. The visiting bio-experts judged the Institute to be in compliance with the provisions and obligations of the BWC with a high degree of confidence (objective 1). The hosts’ openness and cooperative manner significantly contributed to this assessment. In addition, it seemed that most, if not all, participants came away from the exercise

convinced that compliance visits can be an appropriate means of increasing transparency and demonstrating a facility's compliance with the BWC (objective 2), and that increased transparency in a military facility is possible without violating necessary military security measures (objective 3).

14. There is room for improvement in at least three aspects of the exercise. First, the chemical weapons inspection model that was used as the basis for the facility provisions was not a good fit. The bio-experts did not feel the more formal inspection tools made available to them—conducting interviews, taking photographs, checking geographical coordinates—were appropriate in a transparency visit context, nor did they make use of them. Moreover, while the initial lab overview tour was considered useful, it was not felt that a second, more in-depth look at the labs would necessarily add much. Of more importance than hardware, equipment and tools were the people, processes and know-how, and in future on-site visits more emphasis could be placed on dialogue with staff and consideration of a facility's documentation, structures, procedures and practices.

15. Second, to increase their effectiveness, the visitor teams could meet in advance of the on-site visit. During the exercise, there was no pre-visit meeting to agree on objectives, review submitted documentation, divide up tasks, run through issues requiring special attention, agree on the organization of the report and so forth. While some of the visitors knew each other, most had not met or worked together before, and the group dynamics reflected this: the participants operated to a large extent as individuals, not as teams.

16. Third, a major benefit of on-site transparency visits is the opportunity they provide experts to compare approaches and share experiences, perspectives and best practices. They can also provide opportunities for substantive exchanges and the construction of informal networks of international experts. While there were some occasions for these sorts of exchanges and links to be made between the hosts and visitors in the exercise, more emphasis could be placed on mutual learning and follow-on exchanges in the design of a transparency visit.

17. Arms control and disarmament in the biological field is not about eliminating or reducing a material- and equipment-based threat, but about the ongoing management of a knowledge-based risk. As such, on-site peer review visits—like the Institute of Microbiology exercise that focus on interactive communication and bringing experts together—form a crucial element of that mandate. Independent observers also have an important role to play in transparency visits. Not only do they greatly enhance credibility and transparency, independent observers also provide an outside perspective on the dynamic between hosts and visitors. This dynamic is particularly significant in the biological field where the emphasis is not on counting hardware and measuring quantities but almost exclusively on conveying and establishing the intent behind research, development, production and testing activities. Civil society can provide an independent perspective on the often subjective determination process of compliance assessment judgment.

18. The upcoming BWC Review Conference in November 2016 must build on the pioneering efforts of the small number of states that have to date carried out on-site peer reviews and pragmatically demonstrated that options to evaluate compliance and implementation of the BWC exist outside of a legally binding verification.

IV. Further details

19. An extended version of the report has been published and is available to download from the EU Non-Proliferation Consortium website. In addition to the observer reflections above, it provides background on German biodefence facilities and related CBMs, details

the preparation for and activities of the two-day site visit and concludes with the bio-experts' compliance assessment discussion and their report on the exercise.

Filippa Lentzos (2016) *Increasing transparency in biodefence: a 2016 visit to a German military medical biodefence facility* EU Non-Proliferation Consortium Non-Proliferation Papers No.52.

<http://www.nonproliferation.eu/activities/online-publishing/non-proliferation-papers>

20. Germany is hosting a side event during the Review Conference on Tuesday 8 November 2016 13:00-15:00 in Room XXIV where additional information about the peer review exercise will be made available.
