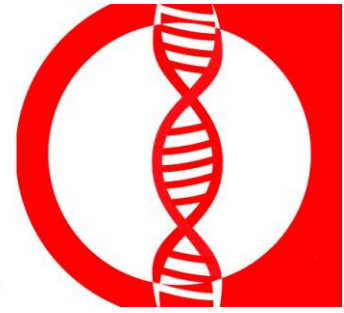


Research Group for Biological Arms Control



News and Activities 11

March 2012

2011 saw the successful conclusion of a number of the Hamburg Research Group's projects. We continued to act as coordinator for two projects of the BioWeapons Prevention Project (BWPP). Together with BWPP network partners we produced the second edition of the BioWeapons Monitor – a collection of country reports aimed at increasing transparency of bioweapons relevant activities – and managed the BWPP online discussions in preparation of the Seventh Review Conference of the Biological Weapons Convention (BWC). Information on both projects can be found on BWPP's website at www.bwpp.org. Two additional projects were successfully concluded: a 2-year study on oversight mechanisms for high risk research in European countries, and a 3-year project on the economic, social and legal aspects of biodefence research.

2011 also was a year of extraordinary staff changes. In September, we welcomed our new colleague Kai Langemak. Kai studies philosophy and biology at the University of Hamburg in his 5th year. He conducts empirical research in support of the Research Group's projects and is responsible for organizing the Model United Nations seminar at our host organization, the Weizsäcker Centre for Science and Peace Research. Our colleague Jan Hoppe left the Research Group in September to begin his master studies at the University of Bielefeld. Iris Hunger and Anna Zmorzynska left in the end of the year. After finishing her project on the oversight of high-risk research, Anna is currently working independently on bioweapons control issues and looking for new ground. Iris has moved to the Federal Information Centre for Biological Security at the Robert Koch Institute in Berlin. We thank Anna, Iris and Jan most warmly for their contributions to the achievements of the Research Group and wish them much success in their new occupations.

Detailed information on the work of the Hamburg Research Group, copies of publications and regular activity updates can be found on our website at www.biological-arms-control.org.

New Project

Civil society engagement 2011

The Hamburg Research Group received funding in 2011 to carry out two BWPP projects. The Swiss Department of Foreign Affairs and the Norwegian Ministry of Foreign Affairs provided support for the BioWeapons Monitor 2011. The Norwegian ministry, in addition, funded the continuation of the BWPP Review Conference Project, a series of online discussions in preparation of the Seventh BWC Review Conference in December 2011. Both projects were managed by Iris Hunger.

Ongoing Projects

The following additional projects were undertaken at the Research Group during 2011. Detailed information on these projects is available on our website at www.biological-arms-control.org:

- ◆ Civil society arms control. NGOs as actors in compliance monitoring (PhD thesis).
- ◆ Economic, social and legal aspects of biodefence research (funded by the German Ministry of Education and Research).
- ◆ Neither safety nor security without cooperation. Control measures for biological high risk research in European Union states (funded by the Fritz Thyssen Foundation).
- ◆ Strengthening the confidence building measure regime under the BWC.
- ◆ Trade monitoring for biological dual use items.

New Publications

2011 Reader on publicly available CBMs

The 2011 CBM Reader provides information on states' participation in the BWC's Confidence Building Measures (CBMs) in 2011, summarizes the information contained in the publicly available CBMs, and provides information on recent CBM-related developments and publications. Following the decision at the Sixth BWC Review Conference in 2006 to limit access to the CBMs to states, we publish the CBM Reader annually to highlight the importance of transparency in the area of biological dual use activities.

Hamburg Research Group for Biological Arms Control. Carl Friedrich von Weizsäcker
Centre for Science and Peace Research. University of Hamburg, December 2011,
<http://www.biological-arms-control.org/publications/CBMReader2011-FinalComplete.pdf>.

Biosecurity aspects in life science programmes at German universities

This paper presents the results of a survey of German public universities, conducted in autumn 2010. The survey looked at the degree to which issues such as dual use, biosecurity, bioterrorism and bioweapons, and the responsibility of scientists are addressed in life scientists' education. It showed that these issues are seldom addressed in life science programmes at German universities. Only one university offers a course that focuses exclusively on these issues. Additional four universities cover the topic in other courses, mostly in courses on bioethics.

Hoppe J (2011), Hamburg Research Group for Biological Arms Control. Carl Friedrich von Weizsäcker
Centre for Science and Peace Research. University of Hamburg, September 2011,
<http://www.biological-arms-control.org/publications/2010BiosecurityUmfrage-Publikation-Final-English.pdf>.

BioWeapons Monitor 2011

The BioWeapons Monitor is a BWPP initiative to help monitor compliance with the international norm prohibiting biological weapons. It takes the Landmine Monitor as its model. The second edition of the BioWeapons Monitor contains reports on eight countries – Germany, India, Japan, Kenya, South Africa, Switzerland, United Kingdom, and USA – presenting open-source information of relevance to the verification of the BWC. The BioWeapons Monitor is not a technical verification system, but an effort of civil society to hold governments accountable for their obligations to eliminate biological weapons permanently and to prevent their re-emergence.

Hunger I (ed.) (2011) BioWeapons Monitor 2011, BioWeapons Prevention Project,
<http://www.bwpp.org/documents/BWM%202011%20WEB.pdf>.

Unfinished business: efforts to define dual-use research of bioterrorism concern

Contributing to the discussion on defining dual use research of concern (DURC), we present in this peer-reviewed article a review of 27 assessments focusing on biological dual use issues published between 1997 and 2008. Dual use research activities of concern referred to in the 27 assessments were identified and compared. In addition, primary research publications explicitly identified in the 27 assessments as examples of DURC were compiled and analysed according to the reasons why they were considered to be of concern. We extracted a core list of 11 DURC activities which could be the basis for common agreement on what is of most concern.

Zmorzynska A, Suk JE, Biederbick W, Maidhof H, Sasse J, Semenza JC, Hunger I (2011), *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, doi:10.1089/bsp.2011.0021.

Improving transparency: revisiting and revising the BWC's confidence-building measures

This peer-reviewed article explains the function of transparency in the context of dual-use activities, reviews the evolution and the current status of the BWC's confidence building measures (CBMs), identifies gaps and redundancies in their coverage, and introduces proposals to transform the CBMs over time into stronger proto-declarations that can truly serve as a source of information helpful in making judgements about compliance with the BWC's core prohibitions.

Hunger I, Dingli S (2011), *Nonproliferation Review* 18(3), pp. 513-526.

La transparence dans le contrôle des armes biologiques

This article argues that an important component in any verification mechanism will be transparency-enhancing procedures. The existing BWC confidence building measures (CBMs) could be the seed of such procedures. During the 2011 BWC Review Conference and the annual BWC meetings thereafter, states should enter into a major review of the CBMs which needs to accomplish two things: focus them on the most relevant topics without duplicating existing reporting arrangements, and mandate the ISU to undertake or arrange for follow-up activities.

Hunger I (2011), *Sécurité globale* No.17 (Autumn 2011), pp. 117-132.

Neither safety nor security without cooperation – Control measures for biological high risk research in European Union states

This poster summarizes the results of the Research Group's project on the regulation of high-risk research in Europe. It illustrates that the existing EU regulations on genetically modified organisms (GMOs) cover most aspects of dangerous research, because they contain a special oversight layer for work with highly pathogenic agents. Due to the synergies between biosafety and biosecurity in all its meanings, the regulations implemented in the EU concerning occupational health and safety and environmental protection relating to health threatening agents or GMOs address most of the biosecurity issues relevant in the arms control context. The poster calls for rethinking biosecurity as a broader concept integrating all security aspects of the life sciences and not only biological arms control related ones.

Zmorzynska A (2011), *Medical Biodefense Conference 2011*, 25-28 October 2011, Munich.
<http://www.biological-arms-control.org/publications/zmorzynska-safety-security-2011.pdf>.

Statement to the 2011 BWC Review Conference

In its statement to the 2011 BWC Review Conference, the Hamburg Research Group expressed its great hopes that the BWC would come out of the conference a stronger, more reliable treaty, having been set on a steady path towards comprehensiveness and modernization. This requires a focus back on the main task of

the BWC, which is to prevent states from using their biotechnological capabilities to develop weapons – now, tomorrow and in the distant future. What the BWC most urgently needs is a mechanism to assess compliance. Verification of compliance with the BWC can, however, not be expected to provide ‘yes or no’ results for compliance assessments, except in the most severe cases of treaty violation. Instead, a functioning verification mechanism would enable us to move from little confidence in compliance towards more confidence in compliance in relation to an increasing number of states.

Hamburg Research Group for Biological Arms Control. Carl Friedrich von Weizsäcker Centre for Science and Peace Research. University of Hamburg, December 2011, [http://www.unog.ch/80256EDD006B8954/%28httpAssets%29/E7FC6EB8D4C2269CC125796B002AB5EB/\\$file/1112RevCon-Statement-final.pdf](http://www.unog.ch/80256EDD006B8954/%28httpAssets%29/E7FC6EB8D4C2269CC125796B002AB5EB/$file/1112RevCon-Statement-final.pdf).

Verifying and demonstrating compliance with the BWC

This paper for the EU Non-Proliferation Consortium notes that the decade after the collapse of negotiations on a verification protocol for the BWC in 2001 went by without discussions on verification, but that recently states have again voiced their support for verification procedures and civil society organizations have touched on the subject. It argues that three elements are central to BWC verification: an information-monitoring capacity, challenge investigations and consultation procedures to address ambiguities and low-level compliance concerns. These three elements already exist in draft form, in the confidence-building measures, the United Nations Secretary-General’s investigation mechanism and the consultative mechanism under Article V of the BWC. All three elements need to be updated and revised.

Hunger I, Zmorzynska A (2011), Non-Proliferation Paper No. 5, EU Non-Proliferation Consortium, December 2011, <http://www.nonproliferation.eu/documents/nonproliferationpapers/irishungerandannazmorzynska4ed780ce74eb3.pdf>.

Workshops and Seminars

Annual Meeting of the German Working Group on CBW Disarmament and Nonproliferation

The Hamburg Research Group was co-organizer of the annual meeting of the German Working Group on CBW Disarmament and Nonproliferation, which took place on 24 and 25 October 2011 in Berlin. The meeting discussed the chances of the 2011 Review Conference being a restart for the BWC. After putting the bioweapons problem in historical context, presentations and discussions focussed on the usefulness of the intersessional process, on how to handle the verification issue, and on the role of technological cooperation in moving the BWC forward.

BWPP Lunchtime Seminar

The Research Group organized the BWPP Lunchtime Seminar “The BioWeapons Monitor 2011 and other 2011 activities of the BioWeapons Prevention Project” on 8 December 2011 in Geneva. During the seminar, BWPP launched the second edition of the BioWeapons Monitor. Information was also provided on two other projects: the Daily Reports providing concise daily summaries on BWC-related meetings in Geneva, and the BWPP RevCon Project, a series of online discussions on conceptual and practical questions relevant to the success of the Seventh BWC Review Conference in 2011.

Lunchtime Seminar of the Hamburg Research Group

The Research Group organized a Lunchtime Seminar “Contributing to the Article X debate: Monitoring international trade in biological dual use equipment” on 9 December 2011 in Geneva. Izaak Wind, formerly

Deputy Director, Tariff and Trade Affairs, of the World Customs Organization (WCO) in Brussels, described existing international trade monitoring approaches and the role of the Harmonized System, the WCO's universal customs codes. Gunnar Jeremias from the Hamburg Research Group described in detail the envisaged trade monitoring mechanism.

Teaching

During 2011, members of the Research Group were engaged in the following teaching activities:

- ◆ Lecture “Contributions of the natural sciences to peace research”, University of Hamburg;
- ◆ Lecture “Science diplomacy”, University of Hamburg;
- ◆ Seminar “Model UN: 2011 Review Conference of the Bioweapons Convention”, University of Hamburg;
- ◆ Seminar “Ethics for Engineers”, Technical University Hamburg-Harburg.

Staff Activities

Jan Hoppe published the results of his survey on biosecurity issues in the curricula of German universities. He also managed the BWPP RevCon Project, a series of online discussions in preparation of the Seventh BWC Review Conference in December 2011, available on the BWPP website. He continued looking after the websites of BWPP and the Hamburg Research Group and contributed to administrative tasks of our host organization, the Weizsäcker Centre for Science and Peace Research. Jan left the Research Group in September 2011.

Iris Hunger finalized work on her project “Economic, social and legal aspects of biodefence research”, managed the Research Group in all its aspects, and was responsible for two 2011 BWPP projects, the BioWeapons Monitor and the BWPP RevCon Project. During the first half of the year, she also supported a project conducted at the Institute for Peace Research and Security Policy Hamburg (IFSH) dealing with the role of technology transfer arrangements in non-proliferation efforts. Iris gave a presentation on “Internet-based intelligence for bioweapons control” during a NATO Advanced Research Workshop in March 2011 in Haifa, Israel. She introduced and co-moderated discussions during the IFSH workshop “Between control and cooperation. Dual-use, technology transfers and the nonproliferation of weapons of mass destruction” in June 2011 in Berlin. In October 2011, Iris talked about “Dangerous knowledge” at the Bayreuth Dialogues, an interdisciplinary exchange on economics and philosophy, and was invited in November 2011 to speak about the 2011 BWC Review Conference in the Sub-Committee for Disarmament of the German Parliament. During the first EU Non-Proliferation and Disarmament Conference in February 2012 in Brussels, she discussed how to assess BWC compliance on the panel “Reducing biorisks and CW threats”. Iris left the Research Group in the end of 2011.

Gunnar Jeremias continued working on his PhD thesis on the role of civil society organisations in monitoring compliance with arms control agreements. He attended the annual meeting of the German Working Group on CBW Disarmament and Nonproliferation in October 2011 in Berlin. Together with Anne Finger (IFSH) he taught the seminar “Ethics for Engineers” at the Technical University Hamburg-Harburg. At the Seventh BWC Review Conference in December 2011, Gunnar presented the Research Group's statement and gave a presentation on the trade monitoring concept during the Research Group's Lunchtime Seminar “Contributing to the Article X debate. Monitoring international trade in biological dual use equipment’. In January 2012, Gunnar succeeded Iris as head of the Research Group.

Kai Langemak joined the Research Group in September 2011. He conducted research in support of the CBM project, the trade monitoring project, and Iris' and Anna's paper for the EU Non-Proliferation Consortium. Together with staff from the Weizsäcker Centre for Science and Peace Research he organized the seminar "Model United Nations" simulating negotiations at the 2011 BWC Review Conference. Kai travelled to Geneva in December 2011 to participate in the seminar which took place in parallel with the Seventh BWC Review Conference. Since December 2011, Kai has been responsible for looking after the Research Group's website.

Anna Zmorzynska finished her project "Neither safety nor security without cooperation – Control measures for biological high risk research in European Union states", which was funded by the Fritz Thyssen Foundation. In June 2011, she travelled to the UK finalising her interview series about legal regulations on BSL-4 laboratories by talking to Porton Down staff. In October 2011, she gave a lecture about the contribution of the biosciences to peace research for the Masters of Peace and Security Studies course at the IFSH, attended the annual meeting of the German Working Group on CBW Disarmament and Non-Proliferation, and presented a poster at the Medical Biodefense Conference in Munich. In December 2011, she travelled to Geneva for the Seventh BWC Review Conference. In February 2012, Anna participated in the EU Non-Proliferation and Disarmament Conference in Brussels. Anna left the Research Group in the end of 2011.



Anna Zmorzynska, Gunnar Jeremias and Jan Hoppe are looking for the future of the BWC outside the Palais des Nations in Geneva.

Contact

Research Group for Biological Arms Control
C. F. v. Weizsäcker Centre for Science and Peace Research University Hamburg
Beim Schlump 83 20144 Hamburg Germany
Tel +49 40 42838 4383 Fax +49 40 42838 3052 E-mail info@biological-arms-control.org
www.biological-arms-control.org