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

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Comprehensive consideration of all provisions of the Convention

The Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists

Submitted by China and Pakistan, Co-sponsored by Brazil

1. Advances in biological science and technology continue to play an important role in fostering human health and wellbeing. However, they also carry potential risks of misuse or abuse.

2. The development of biosecurity codes of conduct for scientists has therefore been a major consideration in global biosecurity governance. Broad acceptance of responsible biological research and development of corresponding codes of conduct will bring out the full potentials and benefits of research in this field and help to prevent its misuse or abuse.

3. The Sixth Review Conference of the BWC in 2006 reached consensus on recognition of "the importance of codes of conduct and self-regulatory mechanisms in raising awareness, and call(ed) upon States Parties to support and encourage their development, promulgation and adoption".

4. Since 2015, efforts have been underway to develop biosecurity codes of conduct for scientists. States Parties, the scientific community and other stakeholders have carried out in-depth discussions on all relevant issues in an inclusive, pragmatic, scientific and cooperative spirit, to draft a code of conduct, contributing to an improved text of a model, voluntary code of conduct based on an expanded political consensus.

5. Over the past year, based on the Chinese and Pakistani working paper of 2016 and discussions in the framework of the BWC, Tianjin University's Center for Biosafety Research and Strategy, Johns Hopkins University's Center for Health Security, and the InterAcademy Partnership (IAP) cooperated to host in-depth discussions on a high level set of biosecurity guidelines that could be used at the national or institutional level to inform, supplement, or update current codes of conduct. The three organizations also facilitated two workshops with scientists from academia and industry from States Parties spanning four continents to contribute to and provide advice on the development of the Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists. The IAP subsequently endorsed the Tianjin Guidelines.

6. The Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists cover major aspects of responsible biological research, such as Ethical Standards, Laws and Norms, Responsible Conduct of Research, Respect for Research Participants, Research Process Management, Education and Training, Research Findings Dissemination, Public Engagement on Science and Technology, Role of Institutions, and International Cooperation.

7. The development of the Tianjin Guidelines responds to the aspirations of and the determination of international scientific community to responsibly conduct biological

research activities. Such an international process, based on science and with a broad representation, can be an effective approach to strengthen international biosecurity governance and cooperation.

8. China, Pakistan and co-sponsors of this working paper:

(a) Fully subscribe to the Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists;

(b) Believe that these will contribute to the realization of the goals and objectives of the BWC, including by promoting discussions in other multilateral fora to further advance global biosecurity governance;

(c) Encourage all stakeholders to voluntarily adopt the Guidelines, adapting them as appropriate for their own situation; and

(d) Invite all States Parties to support this working paper as co-sponsors.

9. The Tianjin Guidelines are hereby annexed to this working paper. It is proposed that the Ninth Review Conference of the BWC:

(a) Endorse the Tianjin Guidelines and encourage all stakeholders to voluntarily incorporate elements from the Guidelines in their practices, protocols, and regulations, and to disseminate the Guidelines, as appropriate; and

(b) Task the intersessional process to exchange information, experiences and good practices about the dissemination of the Tianjin Guidelines and report the outcomes of these exchanges and dissemination to the Tenth Review Conference.

Annex

The Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists

Advances in the biological sciences bring about wellbeing for humanity, but the same advances could be misused, particularly for the development and proliferation of biological weapons. To promote a culture of responsibility and guard against such misuse, all scientists, research institutions, and governments are encouraged to incorporate elements from the Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists in their national and institutional practices, protocols, and regulations. The ultimate aim is to prevent misuse of bioscience research without hindering beneficial outcomes, in accordance with the articles and norms of the Biological and Toxin Weapons Convention (BWC), and in advancement of progress towards achieving the UN Sustainable Development Goals.

1. Ethical Standards

Scientists[1] should respect human life and relevant social ethics. They have a special responsibility to use biosciences for peaceful purposes that benefit humankind, to promote a culture of responsible conduct in biosciences and to guard against the misuse of science for malicious purposes, including harm to the environment.

2. Laws and Norms

Scientists should be aware of and observe applicable domestic laws and regulations, international legal instruments, and norms relating to biological research, including those on the prohibition of biological weapons. Scientists and their professional bodies are encouraged to contribute to the establishment and further development and strengthening of relevant legislation.

3. Responsible Conduct of Research

Scientists should promote scientific integrity and strive to prevent misconduct in research. They should be aware of the multiple applications of biological sciences, including their potential use for developing biological weapons. Measures should be taken to prevent the misuse and negative impacts of biological products, data, expertise, or equipment.

4. Respect for Research Participants

Scientists have a responsibility to protect the welfare of both human and non-human research participants and to apply the highest ethical standards in research conduct, with full respect for the subjects of research.

5. Research Process Management

Scientists should identify and manage potential risks when they pursue the benefits of biological research and processes. They should consider potential biosecurity concerns at all stages of scientific research. Scientists and scientific institutions should put in place oversight mechanisms and operational rules to prevent, mitigate, and respond to risks, and establish a culture of safety and security.

[1] For purposes of this document, “scientists” are practitioners engaged in work that includes biological science, including those involved in funding, education, and training; research and development (in the public and private sectors); project planning, management, dissemination, and oversight.

6. Education and Training

Scientists, along with their professional associations in industry and academia, should work to maintain a well-educated, fully trained scientific community that is well versed in relevant laws, regulations, international obligations and norms. Education and training of staff at all levels should consider the input of experts from multiple fields, including social and human sciences, to provide a more robust understanding of the implications of biological research. Scientists should receive ethical training on a regular basis.

7. Research Findings Dissemination

Scientists should be aware of potential biosecurity risks that might result from deliberate misuse of their research. Scientists and scientific journals should strike a balance when disseminating research findings between maximizing benefits and minimizing harm and communicate widely the beneficial aspects of research while minimizing potential risks that could result from such publication.

8. Public Engagement on Science and Technology

Scientists and scientific organizations should play an active role in encouraging public understanding and interest in biological science and technology, including its potential benefits and risks. They should communicate scientific facts and address concerns, uncertainties and misunderstandings to maintain public trust. Scientists should advocate for peaceful and ethical applications of the biosciences and work collectively to prevent misuse of biological knowledge, tools, and technologies.

9. Role of Institutions

Scientific institutions, including research, funding, and regulatory bodies, should be aware of the potential for misuse of bioscience research, and ensure that expertise, equipment, and facilities are not used for illegal, harmful, or malicious purposes at any stage of bioscience work. They should establish appropriate mechanisms and processes to monitor, assess, and mitigate potential vulnerabilities and risks in scientific activities and dissemination, and establish a training system for scientists.

10. International Cooperation

Scientists and scientific institutions are encouraged to cooperate internationally and to collaborate in the pursuit of peaceful innovations in and applications of the biosciences. They should promote learning and exchange opportunities to share best practices in biosecurity. They are encouraged to actively provide relevant expertise and assistance in response to potential biosecurity threats.

The Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists focus on the prevention of intentional misuse of bioscience research, as per the articles and norms of the BWC, though the prevention of unintentional harm is equally important and closely intertwined. With the inclusion and implementation of elements from the Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists, institutions, professional organizations, and all scientists can increase biosecurity and minimize risks of misuse and harm.