Side Event Chair: Ambassador Matthew Rowland, UK

Introductory Remarks

- Bradford University Disarmament Research Centre is well known for its active engagement and support for the BTWC over many years, especially in the field of education and awareness-raising. The UK is delighted to have co-funded this Guide to biosecurity issues, jointly with Canada, our close partner in the Global Partnership. I would also like to express appreciation to the broad range of international experts who have contributed chapters to the book [a number of whom are here today].
- Some of the advances of modern life sciences and biotechnology are 'dual use'. They may offer exciting prospects for human betterment, or serious, and potentially catastrophic, dangers to us all. By promoting human and animal health, and food security, and by responding to environmental challenges, modern biology enriches our lives and contributes to a better future. Yet, there are also concerns about the risks, both of accidents and deliberate misuse. Addressing the biological security challenges posed by cutting-edge scientific and technological developments thus requires a broad engagement among multiple and diverse communities, including policy makers, legislators, industry, academia, scientists, engineers, science educators, the scientific press, students, as well as the general public.
- At the Seventh Review Conference States Parties to the BTWC acknowledged the need to promote awareness of the potential security concerns and risks arising from advances in the life science advances. The three Standing Agenda Items during the current intersessional process have also provided an opportunity for reaching common understandings on the value of promoting a culture of biological security, and effective and sustained action on education and awareness-raising in contributing, along with other measures, to strengthening national implementation of the Convention.
- This side event therefore provides a timely opportunity to take stock of developments and efforts in this area, and to assess the progress made so far. Looking ahead to the upcoming Eighth Review Conference, we can also begin to think and discuss how to maximise the benefits of initiatives aimed at furthering education and fostering competence in biological security among all those engaged in the life sciences.

Presentations and Presenters' Biographies

The time allocated for each presentation is 10 minutes.

Simon Whitby, PhD is the Director of the Bradford Disarmament Research Centre, and a Senior Lecturer at the Division of Peace, University of Bradford. He is also the lead editor of the Global Partnership-funded Guide, *Preventing Biological Threats: What You Can Do.* Since 2005, Whitby has worked at the interface between the life science and national security communities to address the threat of deliberate disease in the context of rapidly advancing science and dual-use technology. Whitby's work has focused on contributing to the discourse on dual-use biosecurity and bioethics and thus on raising awareness at government, civil society, life science and industry levels about the ethical, legal and social implications of life science research. He has been actively engaged in a range of projects aimed at building a world-wide capability in dual-use bioethics through awareness-raising of biological security issues among the life science community.

Presentation:Simon's presentation gives an overview of the Guide, *Preventing Biological Threats: What You Can Do*, and elaborates on the importance of awareness-raising and education in fostering a sustainable capacity in biological security.

Tatyana Novossiolova is a Wellcome Trust Scholar at the University of Bradford. She is a co-editor of the Global Partnership-funded Guide, *Preventing Biological Threats: What Can You Do*, and an author of the *Biological Security Education Handbook: The Power of Team-Based Learning*. Tatyana has been involved in curricula development in arms control and biological security both for university and specialised professional training courses. She has published widely and presented numerous papers at international conferences.

Presentation: Tatyana's presentation gives an overview of the *Biological Security Education Handbook: The Power of Team-Based Learning*, and elaborates on the value in combining strategy with content when developing educational programmes in biological security.

Maureen Ellis is the Executive Director of the International Federation of Biosafety Associations whose mission is "safe, secure and responsible work with biological materials" worldwide. Ms. Ellis provides biosecurity guidance to IFBA's global network of biosafety associations and manages IFBA's professional certification program for individuals demonstrating competency in biorisk management & biosecurity. Formerly worked as part of Canada's Global Partnership bio programme.

Presentation: Maureen's presentation gives an overview of the International Federation of Biosafety Associations Certification Programme, described in Chapter 5 of the Guide. It elucidates the need for international certification of biosafety and biosecurity professionals and the implications thereof for the BTWC.

Concluding Remarks

- The initiatives presented during the event constitute important stepping stones in the process of promoting education and fostering competence in biological security among all those engaged in the life sciences. The development of educational resources for biological security, in combination with an international certification system, constitute essential elements of the efforts to address the potential security risks arising from the progress in the life sciences, and thus strengthen the BTWC.
- Fostering a culture of biological security and responsible conduct in the life sciences can benefit from enhanced international cooperation and high-level coordination for the implementation of effective, efficient, and sustainable awareness-raising measures. A comprehensive approach to biological security education can significantly contribute to this goal; it needs to be underpinned by multi-stakeholder engagement, a flexible combination of scientist-led, 'bottom-up' and government-supported initiatives, according to individual States Parties' circumstances, adequate financial support, and strategic planning We should look to reflect these points in the report of the Meeting of States Parties.
- I commend Bradford for making the Guide freely available to all on the internet, and encourage delegations to consider its suitability for use in their own educational systems. It is already planned to translate the Guide into Arabic; we hope that it will also be translated into other languages, so that it is as widely accessible as possible.
- The Chemical Weapons Convention Conference of States Parties agreed very recently to set up an Advisory Board on Education and Outreach. The younger Convention has set us a compelling example that we should seek to learn from in the BTWC. Closer collaboration with other such international organisations and bodies which seek to promote security and disarmament education, and regular reporting by States Parties on education activities undertaken in support of the Convention, could help us to enhance biological security and responsible activities in the life sciences.
- Next year's Eighth Review Conference of the BTWC offers an excellent opportunity for promoting biological security education and outreach globally. This could, for example, take the form of an agreement among States Parties on the need to take effective action, both collectively and nationally, to improve education and awareness, and promote engagement with the life science community. This would be an important way of strengthening national implementation of the BTWC. I encourage all of us to reflect on this.