Chapter 28

Introduction

Luciano Maiani and Raymond Jeanloz

As note in the introduction to the forum talk given by Ambassador Grossi, the forum speakers would address broad topics that crossed some of the topics of the day's presentations and discussions, and time was allowed for other participants to ask questions or remark upon the whole day.

The forum speaker for the second and final day of the conference was Antonio Missiroli, NATO's Assistant Secretary General for Emerging Security Challenges. NATO is a military organization that has nuclear forces. NATO sees nuclear weapons as a core component of its deterrence and defense capabilities, and is committed to arms control, disarmament and non-proliferation, like the nuclear weapon states within the alliance (see https://www.nato.int/cps/en/natohq/topics_50068.htm). The organizing committee is committed to addressing problems in the real world, engaging thought leaders, moral leaders, and leaders in international security.

Dr. Missiroli discussed the overall environment of international security and trends in thinking in Brussels concerning non-nuclear emerging threats and the instruments that might be useful in addressing them. Deterrence remains a key element of international security in addressing some threats, but there is no operational model of deterrence in others, such as attacks in the cyber domain. In his talk and in the discussion that followed, Missiroli talked about means of reducing risks other than treaties: If we cannot limit the weapons, perhaps we can limit the targets. There is crossover between the cyber and the nuclear. Participants noted that any system, even air-gapped systems, can be attacked, so it is critical to protect nuclear command and control systems. Cooperation among the nuclear weapon states was suggested to try

L. Maiani (✉)
Accademia Nazionale dei Lincei, Rome, Italy
e-mail: luciano.maiani@cern.ch

R. Jeanloz
United States National Academy of Sciences, Washington, DC, USA
e-mail: jeanloz@berkeley.edu

to prevent use of cyber tools to, in one way or another, catalyse nuclear war. Major new efforts like that are often undertaken only in response to major incidents. It will be a test of our rationality and humanity to see if we can work together without the prompting of a major incident.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.