

Information Note¹

- Event:** *Round-table on WMD and Dual-use Expertise / Knowledge Redirection and Prevention*
- Organizers:** The Science and Technology Center in Ukraine (STCU) in collaboration with the UN Office of Disarmament Affairs
- Date and venue:** 17-18 April, 2013, Kiev, Ukraine
- Participants** *States:*
Azerbaijan, Georgia, Republic of Moldova, Ukraine,

As STCU Constituent Members: Canada, USA and the EU with the following countries represented Hungary, Lithuania and Spain.

International organizations: 1540 Committee Group of Experts; Organization for Security and Cooperation in Europe (OSCE); Science and Technology Center in Ukraine (STCU); United Nations Interregional Crime and Justice Research Institute (UNICRI); United Nations Office of Disarmament Affairs (UNODA)

Individual Expert: A member of the staff of the National Monitoring Directorate, Ministry of Science and Technology, Iraq (invited in a personal capacity as a former 1540 Expert)

For more information on the participants, refer to the link of the STCU below:
<http://www.stcu.int/calendar/index.php?id=383>

1. **Objectives of the workshop**

The key objective of the round-table was to start a dialogue between former weapon scientists and Government Representatives from Azerbaijan, Georgia, Moldova, Ukraine and UNODA - 1540 Committee Experts, to exchange information on the best practices related to the 17 years of STCU experience in promoting WMD non-proliferation objectives through scientists' redirection toward civilian research and other non-weapon related activities, and offer opportunities to learn of experiences and challenges in the same fields from other countries and regions. Such exchange of information could potentially be included in a compendium of effective practices to prevent non-State actors from gaining access to nuclear, chemical and biological weapons and their means of delivery, as mandated by resolution 1540 (2004).

2. **Background**

¹ For information –not an official report. The views expressed here do not necessarily represent those of the 1540 Committee or of the organizers or participants in the event.

The production of WMDs requires the scientific/technical “know how” as well as relevant materials. However, the materials for producing many chemical and biological weapons are largely available in nature or have commercial uses which understate the importance of securing such WMD expertise. Similarly, in the nuclear area, even when materials are available, the availability of specific expertise (for instance for enrichment activities) may become a limiting factor. The efforts to prevent the proliferation of WMD expertise are often labeled as “scientists’ redirection” because they redirect the scientists’ skills and expertise to peaceful civilian activities. Such redirection efforts have historically complemented activities related to securing WMD materials.

The vast majority of redirection efforts have been historically focused on the scientists and engineers of the Former Soviet Union, but there are/were other such activities going on in other regions of the world (e.g. Iraq, Libya) that occurred in different security and political circumstances from those in the former Soviet states. While impossible to predict when or where the next opportunities for redirection will arise, lessons learned and effective practices of programs undertaken up to date to address the “brain drain” proliferation threat may offer opportunities to increase the readiness to act and strengthen the global nonproliferation regime.

The Science and Technology Center in Ukraine (STCU) is an inter-governmental, non-profit organization that creates and implements programs and activities to more effectively assist former weapon scientists and institutes from Azerbaijan, Georgia, Republic of Moldova, Ukraine, and Uzbekistan, in developing their skills and capabilities to support themselves without direct STCU assistance from its donor governments (Canada, European Union, Ukraine, and USA). STCU prepares and guides the recipient scientists and technicians to make the most out of their research, whether it results in commercially viable products or continuing research funding interest outside the STCU, and it encourages them to develop long-term relationships with private sector and/or governmental partners. In collaboration with UNODA, the STCU organized an international meeting for the purpose of sharing effective practices in redirection of former weapons scientists worldwide toward non-prohibited applications of science as well as responsible conduct of research.

3. **Highlights**

The round-table started with opening remarks offered by Ambassador M. Michael Einik (Executive Director, STCU), Ambassador John Teft (US Embassy to Ukraine), Mr. Boris Grinyov (Deputy Head of State Agency on Science, Innovation and Informatization of Ukraine), Ambassador Troy Lulashnik (Embassy of Canada to Ukraine), Dr. Gabriele Kraatz-Wadsack (Chief, WMD Branch, UNODA), and Mr. Oleksandr Aleksandrovich (Director, Directorate for International Security and Disarmament, Ministry of Foreign Affairs of Ukraine). The speakers emphasized, inter alia, the significant role played by the STCU in nonproliferation and in particular on former WMD scientists’ redirection as well as the organization’s efforts to inculcate a security culture and code of ethics across the nuclear, chemical and biological areas and making safety and security integral elements of the scientists’ responsibilities and training.

The round-table featured presentations on STCU program achievements in recipient countries (with speakers from Georgia, Azerbaijan, Republic of Moldova, and Ukraine), on redirection/prevention policies and experiences in STCU recipient countries (with speakers from Georgia, Republic of Moldova, and Ukraine) and in Iraq, presentations on activities of international organizations and civil society (with speakers from the 1540 Committee Group of Experts, OSCE, UNICRI, UNODA, as well as from the Center for International Trade and Security University of Georgia (USA) and the Center for Fundamental and Applied Research Financing (Republic of Moldova).

Starting from the premise that human expertise in WMD science and technology poses as high a risk as the acquisition of WMD materials and that States should strengthen their efforts on ensuring personnel reliability to prevent unauthorized access to WMD materials, the 1540 expert delivered a presentation on *Security Council Resolution 1540 and Personnel Reliability Measures*. She emphasized that historically, the international nonproliferation, arms control conventions, and threat reduction initiatives served as the principal means to prevent illicit trafficking of biological materials and technologies, and that the human factor is a key element in any effective non-proliferation policy. The 1540 expert discussed examples of personnel reliability qualifying criteria and training requirements and presented data from the 2010 national matrices showing that less than 30 out of 192 UN Member States had both legislative and enforcement measures related to personnel reliability in the nuclear, chemical, and biological areas of implementation of resolution 1540 (2004). She concluded with an excerpt from Secretary General Ban Ki-moon speech noting that “*Governments alone cannot confront the risks posed by biological weapons ... to manage the full spectrum of biological risks, you need a cohesive, coordinated network of activities and resources. Such a network will help to ensure that biological science and technology can be safely and securely developed for the benefit of all*” and emphasized the importance of sustainable education and awareness raising on international nonproliferation norms and dual use issues as important elements of broader efforts to achieve global security.

The 1540 expert’s presentation was complemented by that of Dr. Igor Khripunov [Center for International Trade and Security University of Georgia (USA)] on *Professionalism and CBRN Security Culture*. Dr. Khripunov talked about the CBRN security culture as an assembly of beliefs, attitudes, and patterns of behavior which can reinforce or complement operating procedures, rules, regulations and ethical standards in the process of achieving intended WMD nonproliferation and security goals. He emphasized that only personnel empowered by a security culture that comes as second nature can continually evaluate the risk environment, and stay ahead of the threat, and that among the most important shared characteristics of CBRN security culture are: *accountability, reliability, compliance, and vigilance*. Dr. Khripunov also noted that “*a major goal of developing a common architecture for CBRN culture is to enable countries that are lacking relevant experience to optimize the role of the human factor in dealing with CBRN risks and complying with their international obligations, including those under UNSCR 1540 (2004)*”.

While WMD scientists’ redirection programs or capacity building in the area of CBRN security culture are not specifically monitored by the 1540 Committee, they serve to complement and reinforce the legislative and enforcement measures related to personnel reliability which are directly related to the domestic control of nuclear, chemical and biological weapons-related materials & means of delivery (resolution 1540, Operative Paragraphs 3 a & b).

4. **Additional comments**

For further information, please contact the 1540 Committee’s Group of Experts by e-mail at 1540experts@un.org.