

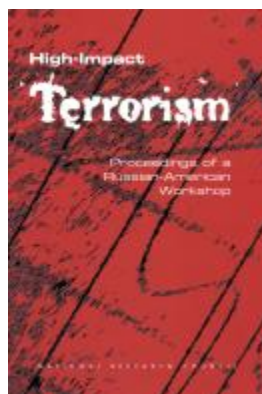
COUNTERING TERRORISM A U.S. - RUSSIAN WORKSHOP SERIES

In June 1999, the presidents of the National Academies and the Russian Academy of Sciences (RAS) agreed that a joint project on combating especially dangerous crimes, particularly terrorism, would be of considerable interest to both Russian and American specialists in a variety of fields. The new threat posed by terrorism in high-tech societies was chosen as a particular focus for the collaboration, in recognition of the potential for mass destruction or mass disruption that exists especially in urban, technology-laden areas.

Four workshops were held on this topic. In June of 2001, the first workshop, which was held in Moscow, focused on countering terrorist attacks that could cause catastrophic damage to civilian populations. A follow-on workshop in March 2003, also in Moscow, identified possible vulnerabilities to terrorist attacks in major cities as well as means for improving the effectiveness and speed of responses if attacks did occur. The third workshop was held in Washington in late January and early February of 2005 and focused on urban terrorism. The fourth workshop was held in March 2007 in Moscow with an emphasis on transportation and energy vulnerabilities of bioterrorism.

Interest in the topic of terrorism heightened in both countries over the course of the collaboration. Just three months after the first workshop, the events of September 11, 2001 catalyzed a renewed commitment to expanded cooperation on terrorism within both the National Academies and the Russian Academy of Sciences. The second workshop, originally planned for December 2002, was delayed for three months due to the seizure of hostages by dissidents during a stage production of the musical *Nord-Ost* in Moscow in October 2002. The third workshop featured a discussion of the tragedy in Beslan and site visits for the Russian participants to Ground Zero and other locations in New York and meetings with first responders there. The fourth workshop in Moscow was followed by meetings with first responders and officials in Moscow and St. Petersburg. The workshops demonstrated the complementary nature of the experiences and expertise of both countries.

Summaries of the proceedings of the first three workshops are set forth below;



HIGH-IMPACT TERRORISM: PROCEEDINGS OF A RUSSIAN-AMERICAN WORKSHOP (2002)

Several dozen Russian specialists attended the sessions, and their many presentations and comments greatly enriched the discussions. The National Academy of Engineering (NAE) selected eight American specialists to make presentations on governmental and nongovernmental experiences in the United States in the fight against terrorism. Some of the presentations by Russian and American specialists reflected a remarkable degree of similarity in views on the terrorist threat (e.g., radiological terrorism, agricultural terrorism), while others indicated different levels of appreciation of vulnerabilities and response requirements (e.g., the long-term Russian attention to protection of industrial facilities, and the extensive American concern over cyberterrorism).

At the close of the workshop, a number of areas of interest for future bilateral cooperation were identified by participants. The Russian hosts of the workshop proposed, in particular, the following detailed suggestions for major cooperative initiatives;

- A working group of American and Russian specialists to address a range of currently neglected issues affecting the likelihood of radiological terrorism, with the purpose of such deliberations being to stimulate actions by the Russian and U.S. governments and by the International Atomic Energy Agency to strengthen international capabilities to combat this threat.
- A joint experiment to test the vulnerability of electrical and electronic connections to electromagnetic pulsed power attacks.
- Development of scientific guidance for the establishment of an international center at Vector near Novosibirsk to investigate the epidemiological, diagnostic, and treatment aspects of outbreaks of infectious disease. Other suggestions of themes for joint efforts that were set forth by American and Russian specialists and that are based on preliminary analyses by the specialists include the following:
 - Studies of the many dimensions of information security, including the clarification of the importance and scope of national strategies to improve protection of critical networks and the identification of areas where international cooperation should be strengthened;
 - Assessments of the types of potential terrorist threats directed at facilities that produce or store dangerous industrial chemicals;
 - Development of methodologies for evaluating engineering and other security enhancements that will reduce the vulnerability of a broad range of industrial facilities (e.g. nuclear power plants, gas pipelines, airports, metallurgical plants);
 - Consultations of experts on the technical aspects of both marketing and tagging of explosives, including record-keeping requirements for taggants and the associated costs;
 - Development of new concepts for more cost-effective destruction of poorly secured chemical weapons stockpiles in Russia;
 - Investigations of the feasibility of terrorist groups' assembling radiological weapons and methods for preventing and detecting such activities;
 - Consideration of the technical details of discriminating between natural outbreaks of diseases and the acts of bioterrorists as well as consideration of the preparations for dealing with the consequences of a bioterrorism attack.
 - Studies of methods for prevention and early detection of animal diseases and for determining the cause of disease outbreaks;
 - Studies of the role of the mass media in terrorism situations and in shaping public attitudes toward terrorism; and
 - Joint activities aimed at adapting to the Russian environment the American experience in training specialists to deal with terrorism, in developing organizational mechanisms for coordinating activities of many organizations in preventing and responding to terrorist attacks, and in using forensic techniques to assist in the search for the instigators of terrorist acts.

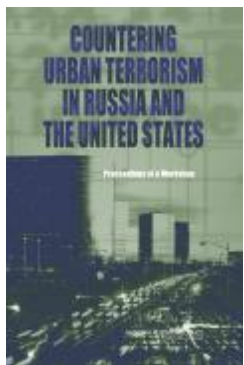


TERRORISM: REDUCING VULNERABILITIES AND IMPROVING RESPONSES U.S.-RUSSIAN WORKSHOP PROCEEDINGS (2004)

After the events of September 11, 2001, the NAS and RAS leaderships developed an expanded program of cooperation in counterterrorism. Parallel committees in the Russian and U.S. Academies were established for this purpose, consisting primarily of academy members with extensive experience in addressing topics of direct relevance to terrorism. The newly appointed committees decided to meet as soon as feasible to develop a broadened agenda for cooperation. The meeting was held in Moscow in March 2003 after being postponed for three months because of delays associated with the seizure of hostages by dissidents at the Dubrovka Theater in Moscow in October 2003. In addition to the plenary sessions, two one-day workshops on urban terrorism and cyberterrorism were held in Moscow just

before the meeting. Following the meeting, the Russian Academy of Sciences arranged consultations for the American participants with various Russian government ministries involved in counterterrorism activities. Prior to these visits, in December 2001, the U.S. National Academies had arranged for a group of Russian specialists to visit the U.S. and exchange views with representatives of U.S. government departments and agencies.

Papers presented at the workshop focused on the topics of urban terrorism and cyberterrorism. The topics range from theoretical frameworks for assessing risk and establishing protection systems in cities, to the roles of various government ministries in combating or responding to terrorist acts, to lessons learned from the September 11th attacks and the Dubrovka Theater situation. Additional topics included prevention of bioterrorism attacks and the security of toxic chemicals and explosive materials against misuse by terrorists. The papers on cyberterrorism included analyses of the risk of different types of cyber attacks as well as strategies for prevention of and education about cyberterrorism.



COUNTERING URBAN TERRORISM IN RUSSIA AND THE UNITED STATES: PROCEEDINGS OF A WORKSHOP (2006)

The third workshop was of particular interest because it included presentations by a number of specialists who have operational responsibilities for countering terrorism in each of the countries, whereas presentations at previous workshops were made primarily by specialists who serve as advisors to governments. Prior to the third workshop, three working groups of U.S. and Russian experts met to consider terrorism threats and responses associated with cybersecurity, ground transportation systems, and energy systems. These working groups had opportunities to meet with a number of specialists in each respective field and to visit facilities of particular interest in the Washington D.C. metropolitan area.

Following the workshop, the Russian specialists traveled to New York City where they had additional opportunities to become familiar with terrorism-related activities of fire, police, and transportation officials and specialists; review of the events of September 11, 2001; inspect developments at Ground Zero; and discuss terrorism issues with specialists at Polytechnic University. The direct involvement of first responders in several of the meetings in New York was of particular interests to the Russian participants in the program.

The workshop proceedings include the papers presented at the workshop, as well as reports of the three working groups that were formed on energy vulnerabilities, transportation vulnerabilities and cyberterrorism issues.

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For More Information

Copies of High-Impact Terrorism: Proceedings of a Russian-American Workshop, Terrorism: Reducing Vulnerabilities and Improving Responses: U.S.-Russian Workshop Proceedings, and Countering Urban Terrorism in Russia and the United States: Proceedings of a Workshop are available from the National Academy Press; call (800)624-6242 or (202)334-3313 (in the Washington metropolitan area), or visit the NAP website at www.nap.edu. For more information on the project, contact staff at (202) 334-2644 or visit the Policy and Global Affairs website at www.nationalacademies.org/pga.