

Hotel GLO-Art, Helsinki: Agenda for workshop as of Nov 28, 2018
Breakfasts and Sessions will be held in Jegund Hall of Hotel.

All presentations, except Keynote Presentation, should be limited to 10-15 minutes, with 5-10 minutes for Discussion.
(Simultaneous Interpretation will be provided)
(Power point can save time)

Monday (Dec 10)

8:30 Introduction:

- Welcome and Interests of Finland: Timo Hellenberg
- Introductory Comments by Co-Chairs Gary LaFree and Stepan Kalmykov
(List of All Presenters and their Institutional Affiliations Is Appended to this Agenda)
- Administrative Issues Addressed by Conference Organizers
- Discussion: Administrative and Organizational Issues

Presentations/Discussions Begin at 9:15 AM

Panel #1: Historical Perspectives

- Risto Volanen: *The Finnish Case of Building Democracy through Crises while Taming Radicalization*
- Alexander Nechaev: *Once Again to the Problem of the "Dirty" Bomb: A Bird's Eye View*
- Glenn Schweitzer: *U.S.-Russia Inter-Academy Collaboration in Analyzing Violent Extremism and Radiological Security Challenges*

Break 10:30 to 10:45

Keynote Presentation to 11:30

- Matti Vanhanen, former Prime Minister and Current Chairman of Foreign Affairs Committee of the Parliament of Finland.

Panel #2: The Linkages among Extremism, Terrorism, and Radiological Security

- Roman Lunkin: *Is There Any Threat of Religious Terrorism? True and False Images of the Extremists*
- Scott Atran: *Terrorism, Revolution, and Intractable Conflicts*
- Stepanov Kalmykov: *Nuclear Forensics: From Nonproliferation to Crime Cases*
- Gary LaFree: *Willingness and Capacity of Terrorist Organizations to Use Radiological Weapons*

Lunch 1:00 to 2:00

Panel #2 continued:

- Audrey Kruth Cronin: *Terrorism and Emerging Technologies*
- Konstantin Bogdanov: *Unmanned Systems and Radiological Weapons: The Nexus of Extremists and Terrorists*
- Gary Ackerman: *Terrorist Threats to Nuclear Facilities and Radiological Materials: Trends and Emerging Issues*
- Tom Bielefeld: *Evolution of Terrorists' Tactics in Use of Technology and Means of Recruitment: Implications for Nuclear Security*
- Sergey Krasnaperov: *Analysis of Research Priorities in Addressing Risks and Capabilities of Unauthorized Use of Radiological Sources by Extremists and Terrorists*

Break 4:00 to 4:15

Panel #3: National and International Policies and Programs

- Kenneth Brill: *U.S.-Russia-European Collaboration To Prevent Nuclear Terrorism: A Roadmap for Using the Amended Convention on Physical Protection of Nuclear Materials*
- John Bernhard: *International Legal Framework for Radiological Security*
- Stiina Rajala, *Organized and Cross-border Crime in Finland*
- Anton Khlopkov: *Potential U.S.-Russian Cooperative Projects: Strengthening Security of Radioactive Sources in Central Asia*

Adjourn 5:30

Tuesday (Dec 11)

Presentations/Discussions begin at 8:30

Panel #3 continued:

- William Courtney: *U.S. Policy in Countering Radiological Terrorism*
- Juha Rautjarvi: *Role of the Finnish State Radiation Regulatory Agency in Implementing the National Strategy for Comprehensive Security*
- Kari Perajarvi, *Remote Expert Support and Nuclear Security*
- Michel Bijak: *Preparedness of the First Responder Services for Radiological Threats as a Key Element of the Public Security System*

Break 10:15 to 10:30

Panel # 4: Important High-Ionizing Radiation Sources

- Evgeny Papynov, *Secure Matrixes for Ionizing Radiation Sources based on Cesium-137 and the Technology of their Production*
- Charles Ferguson, *Reducing Reliance on Cesium-137 and Other Sources of Concern*

Panel #5: Dealing with Disposed, Damaged, or Lost Radiation Sources and Lost Materials

- Laurin Dodd: *Radiological Challenges in the Chernobyl Zone*

Suggested Working Groups: Three To Be Established

Working Group #1

1: **Lessons Learned:** What are the most important lessons learned from past incidents involving misuse of radiation sources? Are there many examples of **terrorist groups** searching for and/or obtaining radiation sources? What steps have been taken nationally and internationally to prevent repetition of such examples, and what additional steps should be taken? How likely will similar incidents be repeated in the absence of more aggressive programs to prevent dangerous incidents? What types of regularized programs beyond the usual security measures surrounding the transportation, handling, use, and storage of radiation sources could be effective in preventing and/or responding to threats of radiological terrorism?

Working Group #2

2: **Future Terrorism Approaches of Concern.** Are there new types of approaches lurking in the background for using radiation sources as weapons of terrorism? (For example, targeting clusters of the population at sporting or celebratory events, in unprotected facilities, or throughout large urban areas?) Will insurgent or terrorist groups (or individuals) have the financial and technical wherewithal and adequate commitment to mount dangerous approaches? What steps can be taken to reduce the likelihood of success of such approaches? More generally, what should be the research agenda for addressing radiological terrorism—research by social scientists, by physical scientists, by engineers, by systems analysts, or by combined teams.

Working Group #3: Collaborative Future Efforts: Are there innovative and effective approaches involving Russian and American scientists—with European partners as appropriate—in improving global security to prevent radiological terrorism, given the political limitations on US-Russian intergovernmental efforts? (Conferences, working groups, exchange visits, joint research efforts, joint simulations, etc?) How can joint nongovernmental efforts (research, analytical, simulation) most effectively impact in a positive manner on governmental policies? Are there specific regions of the world, specific categories of disenfranchised populations, and/or inadequately protected ionizing sources where joint efforts could help clarify the threats of the future and contribute to development of preventive measures to reduce the likelihood of terrorist incidents involving radiation sources?

Working Group #4: Reduced Reliance on Radiation Sources for Medical, Geophysical, Food Preservation, or Other Important Purposes. Are there examples of national or international efforts currently underway, beyond the Cesium 137 initiative, for reducing reliance on radiation

sources? Are there, or should there be, robust research efforts in this regard, and what would be the costs of such efforts if they are to have a significant global impact?

Presenters at Workshop (In Order of Presentations)

- 1: Risto Volanen, State Secretary of Finland (Retired)
 - *The Finnish Case of Building Democracy through Crisis while Taming Radicalization: An Historical Perspective*
- 2: Alexander Nechaev, St. Petersburg Institute of Technology
 - *Once Again to the Problem of the “Dirty” Bomb. A Bird’s Eye View*
- 3: Glenn Schweitzer, U.S. National Academies of Sciences, Engineering, and Medicine
 - *Brief History of U.S.-Russia Inter-Academy Collaboration in Analyzing Violent Extremism and Radiological Security Challenges*
- 4: Matti Vanhanen, Former Prime Minister, Current Chairman of Foreign Affairs Committee of the Parliament of Finland
 - **Keynote Speaker**
- 5: Roman Lunkin, RAS Institute for Europe, Moscow
 - *Is there Any Threat of Religious Terrorism? True and False Images of the Extremists*
- 6: Scott Atran, Oxford University and University of Michigan
 - *Terrorism, Revolution, and Intractable Conflicts*
- 7: Stepan Kalmykov (Corresponding Member, RAS), Moscow State University
 - *Nuclear Forensics: From Nonproliferation to Crime Cases*
- 8: Gary LaFree, University of Maryland
 - *Willingness and Capacity of Terrorist Organizations To Use Radiological Weapons*
- 9: Audrey Kurth Cronin, American University
 - *Terrorism and Emerging Technologies*
- 10: Konstantin Bogdanov, Institute for the World Economy and International Relations, Moscow
 - *Unmanned Systems and Radiological Weapons: The Nexus of Extremists and Terrorists*
- 11: Gary Ackerman, State University of New York, Albany
 - *Terrorist Threats to Nuclear Facilities and Radiological Materials: Trends and Emerging Issues*
- 12: Tom Bielefeld, Nuclear Security Research and Consulting, Erlangen, Germany
 - *Evolution of Terrorists’ Tactics in Use of Technology and Means of Recruitment: Implications for Nuclear Security*
- 13: Sergey Krasnoperov, RAS Institute for Nuclear Safety
 - *Analysis of Research Priorities in Addressing Risks and Capabilities of Unauthorized Use of Radiological Sources by Extremists and Terrorists.*
- 14: Kenneth Brill (Ambassador of United States to IAEA, retired), Several Nongovernmental Organizations
 - *U.S.-Russian-European Collaboration To Prevent Nuclear Terrorism: A Roadmap for Using the Amended Convention on Physical Protection of Nuclear Materials*
- 15: John Bernhard, (Ambassador of Denmark to IAEA, retired) Partnership for Global Security
 - *International Legal Framework for Radiological Security*
- 16: Stiina Rajala, National Bureau of Investigation of Finland
 - *Organized and Cross-Border Crime in Finland*

- 17: Anton Khlopkov, Institute for Energy and Security, Moscow
- *Potential U.S.-Russian Cooperative Projects: Strengthening Security of Radioactive Sources in Central Asia*
- 18: William Courtney (Ambassador of United States to Kazakhstan, Retired), Rand Corporation
- *U.S. Policy in Countering Radiological Terrorism*
- 19: Juha Rautjarvi: Societal Security Solutions Ltd. and CBRNE Suomi Association Finland
- *Role of the Radiation Regulatory Agency of Finland in Implementing the National Strategy for Comprehensive Security*
- 20: Kari Perajarvi, Radiation Regulatory Agency of Finland
- *Remote Expert Support and Nuclear Security*
- 21: Michel Bijak, University of Lodz, Poland
- *Preparedness of the First Responding Services for Radiological Threats as a Key Element of the Public Security System*
- 22: Evgeny Papynov, RAS Institute of Chemistry and Far East University, Vladivostok
- *Secure Matrixes for Ionizing Radiation Sources Based on Cesium-137 and the Technology of Their Production*
- 23: Charles Ferguson, U.S. National Academies of Sciences, Engineering, and Medicine
- *Reducing Reliance on Cesium 137 and Other Sources of Concern*
- 24: Laurin Dodd, Consultant, United States
- *Radiological Challenges in the Chernobyl Zone*
- 25: Charles Streeper, Los Alamos National Laboratory
- *Sustainable Security through International Source Repatriation*
- 26: Vladislav Petrov, Institute of Geology of Ore Deposits, Petrography, Mineralogy, and Geochemistry
- *Modeling of Radio-Nuclide Migration and Assessment of Underground Liquid and Solid Waste*
- 27: Mikhail Diordiy, State Enterprise RADON, Moscow
- *Spent Radiation Sources Storage in Containers To Prevent Terrorism and Extremism*