

## Nuclear Geopolitics in an Evolving Environment: Global Responsibility, Influence, and Innovation in the 21<sup>st</sup> Century

Sponsored by the Partnership for Global Security's Initiative on Nuclear Security, Governance and Geopolitics

May 30, 2018 Carnegie Endowment for International Peace Washington, D.C.

## **AGENDA**

9:30 - 10:00	Introduction and Overview
Session 1	<b>Toby Dalton</b> , Carnegie Endowment for International Peace <b>Ken Luongo</b> , Partnership for Global Security
	Introduction; Overview of the purpose and goals of the workshop; why nuclear geopolitics is important for global security, nonproliferation and commerce.
10:00 - 11:00	Status and Objectives of Russian and Chinese Nuclear Export Models
Session 2	Russia claims to have \$133 billion in foreign nuclear reactor orders, including those under construction in Bangladesh, Belarus, India, Slovakia, China and Ukraine and announced nuclear projects in Finland, Turkey and Egypt. China has 21 reactors on line and 19 under construction. It has concluded major deals with Argentina and the U.K.  • Will the 21st Century's main nuclear suppliers be Russia and China?  • What are their export models?  • What are their economic and geopolitical objectives?
11:00 - 11:15	Coffee Break
11:15 - 12:00	Nuclear Exporters' Influence on Governance: Who Makes the Rules?
Session 3	<ul> <li>Fred McGoldrick, Bengelsdorf, McGoldrick, and Associates; State Department (Retired)</li> <li>It is often claimed that the traditional, western civil nuclear supplier nations (U.S., France, Japan) have had the most influence over the creation and evolution of the non-proliferation and export control regimes.</li> <li>To what extent have the major nuclear exporting states influenced the development and evolution of the global nonproliferation and nuclear export control regimes?</li> <li>What issues have united and divided the major nuclear exporting states in crafting these regimes?</li> <li>Which supplier states have played the most important roles in promoting and defining these regimes?</li> <li>Which supplier states have hampered or flouted these regimes?</li> <li>What lessons are to be learned from this history?</li> </ul>



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12:00 - 12:30	Lunch
12:30 - 1:30	Avoiding a Race to the Bottom: How the Battle for Market Share can Impact Non- Proliferation and Security Standards
Session 4	Dr. Anita Nilsson, AN and Associates
	<ul> <li>There is a growing fear that if Russia and China become the dominant nuclear suppliers in this century there will be an erosion of non-proliferation and nuclear security standards and the traditional suppliers will be unable to exert the necessary influence to counteract this trend.</li> <li>Are there examples of where Russia and China have actively sought to undercut non-proliferation and nuclear security standards on the global stage?</li> <li>Is a deminimus approach to non-proliferation and security an ingrained element of their export philosophy and what are the dangers and strategies for responding to it?</li> <li>Are there engagement strategies with Russia and/or China, or inducements for following best practices, which can support the maintenance of high non-proliferation and security standards?</li> <li>How effective can the U.S. and its allies be in promoting non-proliferation and security in an environment where they are not dominant nuclear exporters.</li> </ul>
1:30 - 2:30	Promoting Innovation: What's at Stake in Winning the Advanced Nuclear Reactor Race
Session 5	Dr. Ashley Finan, Nuclear Innovation Alliance
	It is likely that in the U.S. and Western Europe, the era of the large light water reactor is going to come to a close by mid-century as a result of cost and other energy competition issues. But, there is a new generation of proposed smaller, safer, more secure advanced reactors under development in a number of countries, including the U.S., South Korea, Russia, China, Canada, and in Europe. These generation IV reactors are distinctively different from LWRs and use other coolants and fuel cycles concepts. Many of the concepts for these reactors are untested and the market for them is unclear, especially without demonstration of them in a developed economy nation. However, if this market develops, it could demand hundreds or more of these reactors and significantly change the nuclear regulatory and global governance regime.
	<ul> <li>Which nation(s) are the leading developers for Gen. IV reactors?</li> <li>What is the international market for these reactors?</li> <li>What is the role of the U.S. DoD in advancing these reactors for their energy needs?</li> <li>Will the leaders design and control the regulatory, safeguards, and security regimes?</li> <li>Is the U.S. and its allies willing to take the aggressive actions (including diplomatic and financing) that are necessary to control the development of the guidance for this new class of reactors?</li> </ul>
2:30 - 2:45	Coffee Break



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2:45 - 3:30	High Stakes Nuclear Development in the Middle East: The Role of the U.S. and Its Allies as Commercial Competitors and Partners
Session 6	Paul Murphy, Gowling WLG  The tender by Saudi Arabia for two new LWRs places the U.S., South Korea, and France in competition for that reactor business along with Russia and China. South Korea is the primary nuclear supplier for the United Arab Emirates' four nuclear reactors and it also has an agreement with Saudi Arabia on the SMART small modular reactor and with Jordan to supply a research reactor. This offers them some advantage in the region. However, the nuclear industries in the U.S., France, and South Korea are all facing domestic political challenges, financial headwinds, and international competition from state-supported competitors in Russia and China.  • What is the future of the civil nuclear supplier relationship between the U.S. and its allies – competition or collaboration?  • Can joint relationships be strong enough to compete with the state-supported ambitions of Russia and China?  • Can the U.S., France or ROK go it alone in the international nuclear market?
3:30 - 4:00	Conclusions and Next Steps
Session 7	<ul> <li>What are some of the major take-aways from the discussion and how can they be built out in the coming months?</li> <li>What additional steps/strategies are needed in this area?</li> <li>What type of publication/media is best suited to identify the issues and stakes associated with nuclear geopolitics in the 21st Century?</li> <li>What issues should future workshops cover?</li> <li>Is there value in forming a nuclear geopolitics working group?</li> </ul>