

# Rekindling Nuclear Stewardship: A Critical Re-examination of the U.S.-Russia R&D Agreement

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*The views and opinions expressed in this presentation are those of the authors and do not necessarily reflect the views or policies of their respective organizations or of any agency of the U.S. government*

# Where we are today...

- Nearly all U.S.-Russia nuclear cooperation suspended since 2014
  - Exceptions: HEU Fuel Removals, limited expert-to-expert contacts at IAEA
- U.S.-Russian relations are at lowest point since the Cold War
  - Resumption of any cooperation unlikely in the near/medium term
- Russia and the U.S. retain the world's largest nuclear complexes
  - Russia continues to hold more weapons-usable nuclear material in more buildings and accessible to more people than any other country in the world
- Security across Russia's nuclear complex has improved dramatically, though serious challenges persist
  - Risk of insider theft; high level of corruption perception
- Russia appears to have adopted a zero-sum stance towards international nuclear security efforts (eg. Nuclear Security Summit, IAEA, etc)
- Divergence of US/RF priorities continues to be a major impediment for nuclear cooperation

# Propositions

- It remains in the national security interests of both the United States and Russia to find a basis to resume nuclear security cooperation (worth noting Russia links NS cooperation with NE cooperation)
- The likelihood of a resumption of “CTR-like” assistance that exclusively addresses nuclear security in Russia, in near-term, is close to zero
- If political circumstances change, however, both sides should consider the 2013 Nuclear R&D Agreement as the legal framework of choice for future cooperation

# Legal and Political Frameworks

Legal Arrangement or Political Framework	Status
U.S.-Russia 123 Agreement	In force; neither requires nor commits sides to specific implementing activity
2013 MNEPR Protocol	In force; Russian nuclear entities may be prohibited from cooperation under the MNEPR Protocol
HEU Research Reactor Conversion Agreement	Terminated
Plutonium Management & Disposition Agreement	Suspended
R&D Agreement	Suspended
GICNT	Ongoing; does not address nuclear security in Russia
Global Partnership	Russian membership suspended
IAEA	Ongoing; Russian engagement is largely obstructive when it comes to nuclear security issues at the Agency

# What is the R&D Agreement?

- Signed in 2013 by U.S. Secretary of Energy Ernest Moniz and Rosatom Director General Sergey Kiriyenko to implement the 123 Agreement and expand cooperation between Rosatom and DOE
- Unlike previous U.S.-Russia nuclear agreements, cooperation “shall be carried out on the basis of mutual benefit and equality”
  - Cooperative threat reduction to cooperative risk management
- Scope of cooperation includes, but is not limited to: civil nuclear energy, nonproliferation, IAEA safeguards, nuclear security, nuclear safety, nuclear science, controlled nuclear fusion, environmental remediation, etc.
- Annex lists 14 Russian nuclear facilities and 15 U.S. nuclear facilities available for joint cooperation

# Why the R&D Agreement?

- It offers a clear alternative to the past of unilateral, unidirectional assistance; each side would cover its own costs, make similar contributions, and enjoy similar benefits
- Language reflects principles of mutual benefit, equality, and even reciprocity = important for political acceptability in Moscow/Washington
- Drafters left scope open to cover wide range of activities and issues; the parties can decide to use the R&D Agreement how they wish
- **Russia did not set specific preconditions for resuming cooperation** (differs markedly from suspension of the PMDA, other agreements)

# Reactivating the R&D Agreement: Preconditions, Practical Steps

## Precondition

- Political will/interest to resume engagement that, at the very least, does not preclude mutually beneficial nuclear security and nuclear energy cooperation

## Practical Steps

1. Consider questions that could facilitate action, should conditions permit:
  - What kind of nuclear energy cooperation (pre-commercial R&D, nuclear safety-related cooperation) might be considered permissible by Washington?
  - What kind of nuclear security cooperation might be considered permissible by Moscow?
2. U.S. notification of interest or proposal to resume activities under R&D agreement
3. Meeting of the 1<sup>st</sup> JCC of the R&D Agreement

# Possible *Initial* Activities Under the R&D Agreement

## Activity

*Establish a joint U.S.-Russian technical working group to pursue research & development on lower-cost, more compact, and higher-resolution radiation detector systems for countering nuclear smuggling*

*Establish a joint U.S.-Russian technical working group to pursue research & development on accident-tolerant fuels*

*Cooperate on training the next generation of nuclear safety experts*

*Establish a joint U.S.-Russian technical working group to pursue research and development on improved nuclear security and accounting technologies*

*Establish a joint U.S.-Russian technical working group to pursue research and development on nuclear environmental remediation technologies*



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## Pathways to Cooperation

A Menu of Potential U.S.-Russian  
Cooperative Projects in the  
Nuclear Sphere



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