Current Challenges in U.S.-Russian Nuclear Security Cooperation

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Tensions over Ukraine

Tensions over the crisis in Ukraine have damaged the U.S.–Russian relationships to levels that have not been seen since the end of Cold War. Yet, the impact of this crisis on the U.S.-Russian nuclear security cooperation has been surprisingly low so far. Parties continue regular discussions at the program management and project teams levels, work under contracts that were signed before the crisis continues, and new contracts were signed after crisis began. This is likely due to the fact that, at the working level, both sides see value in cooperation and the issue of nuclear security cooperation has relatively lower profile at political level compared to other issues on the U.S.-Russian agenda. This mitigates damage to nuclear security cooperation now. However, if the crisis will have a longer term impact on the U.S.-Russian political relationship, there are chances that nuclear security cooperation may become a victim of this decline.

Longer Term Trend in Russia's Approach to Bilateral Nuclear Security Cooperation

At the moment, nuclear security cooperation is more affected by another longer term trend toward changes in the cooperation framework due to Russia's dissatisfaction with the way cooperation was implemented before. This dissatisfaction resulted in the termination of the old Agreement between the Government of the United States of America and the Government of the Russian Federation Regarding Cooperation in the Area of Nuclear Material Protection, Control and Accounting (MPC&A Agreement) and its replacement with Framework Agreement on a Multilateral Nuclear Environmental Programme in the Russian Federation (MNEPR Agreement) as a legal framework for the U.S.-Russian nuclear security cooperation. This change will lead to greater restrictions on the access of the U.S. personnel to Russian nuclear sites.

Further, the number of sites involved in cooperation will likely decrease due to assignment of special status of Federal Nuclear Organizations to a number of organizations that are key components of the Russian nuclear weapon complex. Details regarding the status of Federal Nuclear Organizations are not available, but it is likely that it will involve greater restriction on international cooperation of these organizations, including site access. According to the President's decree issued in June 2014, five organizations involved in cooperation were assigned this status, including the Mining and Chemical Combine and Mayak (major nuclear fuel cycle sites hosting dozens of tons of weapon grade nuclear materials), VNIIEF and VNIITF (nuclear weapon research and development institutions with significant stocks of weapon grade nuclear materials) and VNIIA (research and development institute in Moscow with no nuclear material located on site).

The change from the MPC&A Agreement to MNEPR Agreement also resulted in significant operational impacts, as contracting procedures had to be adjusted. It took more than 6 months after the new agreement was signed before new contracts between the U.S. national laboratories and Russian organizations were signed. More changes in this area are forthcoming, as Rosatom works toward introducing integrated contractors to manage nuclear security cooperation activities instead of multiple Russian organizations working directly with the U.S. national laboratories. Rosatom has indicated it is conducting a review of this cooperation that will be completed by the end of 2014.

Deficit of Substantive Cooperation Areas

Another important issue is the substantive scope of cooperation. Since cooperation started in the 1990s, the parties managed to resolve the most significant problems and security of Russian nuclear sites has increased dramatically. Now the parties face the challenge of identifying areas for cooperation that would be mutually acceptable and still have a potential to make a significant difference.

OPPORTUNITIES FOR BILATERAL COOPERATION IN RUSSIA

Considering the challenges the U.S.-Russian nuclear security cooperation now faces, all stakeholders interested in continuing cooperation need to focus on maintaining ongoing communications on the issue at multiple levels, both as part of bilateral interactions and domestically, and work to identify areas for cooperation that would be mutually acceptable and beneficial.

Maintain Communications on the Issue

First, communications on the MPC&A program level should continue. This includes project team meetings as part of existing activities or planning new activities and MPC&A program management meetings. The goal of project team meetings is to ensure smooth implementation of ongoing activities and accomplishment of intended plans, in order to avoid issues with project implementation that would provide grounds to cease cooperation. MPC&A program management meetings are needed to facilitate cooperation and make sure that project teams have everything they need for work at their level. MPC&A program management should have all appropriate information and communicate it to political levels to support decision-making on the future of nuclear security cooperation. As mentioned above, the current crisis in the U.S.-Russian relationship has not had a major impact at this level so far. Efforts must be maintained to protect nuclear security cooperation from the negative impact of other issues on the U.S.-Russian agenda.

Second, Rosatom and DOE leadership need to maintain communications at their level, to secure the place of nuclear security cooperation on the bilateral nuclear agenda among other issues of potential interest. Maintaining interactions across all nuclear related domains will create a healthy environment and boost nuclear security cooperation. Unfortunately, at present the U.S. side has cut off all cooperation on nuclear energy and nuclear science.

Third, nuclear security issues should find their place on the political-level agenda, including Presidents, Russian Ministry of Foreign Affairs and the U.S. Department of State. While the agenda of the U.S.-Russian discussions at political levels today focuses more on disagreements between the two countries, there are still issues of mutual interest. It would be

helpful if, in the current crisis environment, the parties confirmed their commitment to nuclear security cooperation. From this standpoint the fact that Russia was excluded from the G-8 and was not part of non-proliferation and disarmament discussion during the summit in Brussels did not help to promote nuclear security.

Domestically, executive branches, academia and NGO communities need to work with constituencies in parliaments, mass-media and general public to create an environment conducive to (or at least not impeding) nuclear security cooperation. It is important, for U.S. experts and NGOs to work with the Congress to build continued support for nuclear security cooperation (and support for flexible approaches); it is also important, to sustain support for these efforts, to moderate the level of anti-American hysteria in the Russian parliament, mass-media, and general public.

Identify Mutually Acceptable Areas for Cooperation

Historically, one of the most important components of the U.S. assistance to Russia was the U.S. ability to confirm intended use of provided financial support. This often meant access to Russian nuclear sites and sharing information that could be considered sensitive, thus raising concerns on the Russian side. These concerns were among those that led to revising the legal framework for cooperation.

However, cooperation can proceed without allowing significant access to Russian nuclear sites and compromising sensitive information. Improvements at specific nuclear sites are almost completed. The largest security problems at these sites have been resolved and Russia has the resources to take care of remaining issues without U.S. funding support, thus removing the need for confirming intended use of provided funds and appropriate access to Russian nuclear sites.

In the current environment it might be helpful for the U.S. to stop pushing for cooperation that might involve risk of revealing sensitive information, including cooperation requiring access to nuclear sites. This would remove one of the most irritating components on the U.S.-Russian nuclear security agenda. Instead, cooperation should focus on activities that can be implemented off-site, including regulations development, personnel training, best practice exchanges, and other activities related to creation of national level nuclear security infrastructure. Another important area of activity is working with Rostechnadzor, the Russian nuclear regulatory body, to improve its capabilities in regulations development, licensing, and oversight for the purposes of nuclear security. Risks of revealing sensitive information through cooperation with Rostechnadzor are minimal.

Best Practices

Sharing U.S. and international nuclear security best practices is one of the most valuable part of the U.S.-Russian cooperation. This cooperation should continue, especially in the areas that are new to the Russian experts, such as systems performance testing, insider threat prevention, operational cost analysis, configuration management, and others. Part of the current best practice exchange process is an effort to implement certain best practices at Russian nuclear sites following awareness and training workshops on the issue delivered by the U.S. experts. However, if this part of cooperation discontinues and the U.S. does not have sufficient feedback from the implementation of best practices at specific sites , best practice exchanges should still continue, as there is evidence that Russia implements certain

improvements using its own resources on the issues, where the joint U.S.-Russian effort was not successful due to information sensitivity issue.

Sustainability

Another important area for cooperation is sustainability of nuclear security in Russia once the U.S. assistance ends. Current status of this issue in Russia is far from perfect and there is still significant room for improvement. One of the key problems impeding progress in this area is the difference in understanding of the sustainability concept between the U.S. and Russian sides. Russian understanding is typically limited to ensuring operability of MPC&A equipment through maintenance, repairs, purchasing spare parts and consumables, and replacement of equipment using U.S. funds. The U.S. understanding of sustainability implies a specific approach to managing MPC&A systems, including equipment, procedures, and personnel, in a way that would ensure continuous improvement and adequacy in the face of a changing threat environment over an indefinite period of time under existing resource constraints. The U.S. should implement a sustainability awareness program targeting managers and security system analysts to ensure Russian understanding and commitment to sustainability principles. Once the Russian side has a proper understanding of sustainability and realizes its benefits to nuclear security operations, this will likely increase interest towards learning available best practices from the U.S.

Regulation

Developing the capabilities of Rostechnadzor, the Russian nuclear regulatory body, is another potential area of cooperation that bears minimal risks, as Rostechnadzor does not have access to sensitive weapons information. A key issue related to Rostechnadzor operations is the fact that its human resources designated for MPC&A regulation and oversight are limited and might not be adequate to the task. As long as staffing limits for Rostechnadzor are established by government decree, and increase in personnel, while not impossible, is hard to achieve in reality. Thus, cooperation should focus on providing Rostechnadzor with additional training and proper tools that can increase its personnel efficiency in implementing licensing and oversight tasks and developing capabilities of technical support organizations.

OPPORTUNITIES FOR COOPERATION IN THIRD COUNTRIES

Build on Experience of Bilateral Cooperation

Sharing the experience of bilateral cooperation is one of the most valuable contributions the United States and Russia can make for international efforts to improve nuclear security in third countries. This would include cooperation best practices, as well as issues that have arisen (as seen by both parties), impact of these issues on cooperation implementation, and ways such issues have been addressed. Bilateral cooperation faced multiple issues that potentially resulted in massive wasting of financial resources and significant delays in implementing joint efforts. Lessons learnt from the U.S.-Russian cooperation can significantly increase effectiveness of cooperation with other countries. As international nuclear security community prepares for 2016 Nuclear Security Summit, this can be one of the “gifts” Russia and the U.S. can jointly make.

Promote Nuclear Security

The U.S. and Russia should work to raise the profile of nuclear security as a key component of any national nuclear energy program. Countries considering development of domestic nuclear energy capabilities first pay attention to benefits from this development. However, they might overlook nuclear security responsibility that comes along with nuclear energy benefits, and the costs and resource requirements associated with this responsibility.

Identify Areas for Joint Assistance

The U.S. and Russian should also work together to identify potential areas of assistance to be provided to third parties, where Russia and the U.S. can agree on the scope and where the U.S. and Russian resources and expertise can complement each other. Potential areas for cooperation can include:

- Development of the national nuclear security infrastructure, including establishment of institutional structure, regulations, training recipient country personnel using the U.S. and Russian training centers and instructors, developing domestic training capabilities, and supporting nuclear security planning.
- Sharing key best practices: these could include, among others, approaches to design basis threat development and vulnerability analysis, evaluating systems effectiveness and performance testing, pro-forces operations, license review of MPC&A related chapters of safety analysis reports supplied by the applicant, oversight over nuclear security, and others.

Implement Pilot Project

The U.S. and Russia should also consider implementing a pilot joint assistance project to test and refine assistance approaches. Belarus could be one of the good potential candidates for such a pilot project. The U.S. has experience supporting nuclear security improvements in Belarus. Assistance stopped in 2013, yet nuclear security infrastructure in Belarus is still far from perfect. From this cooperation the U.S. has good understanding of the current state of nuclear security in Belarus. On the other hand, Russia is slated to build the first nuclear power plant in Belarus and is helping to develop domestic nuclear infrastructure in Belarus as part of this effort.