

NEW START SIGNED, WHAT'S NEXT?

Shaping a Common Vision of Security between Russia and the United States

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U.S. – Russian Cooperation on Nuclear Security

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Introduction

Preventing terrorists from obtaining nuclear weapons and material is of paramount importance for nuclear security. As demonstrated by recent events, such as the unanimous endorsement of United Nations Security Council (UNSC) Resolution 1887 in September 2009 and the high-level Nuclear Security Summit in April, the urgency to address nuclear terrorism has become a priority on the foreign policy agenda of the United States and Russia. According to a recent nuclear security report, Russia ranks second only after Pakistan as the state with the highest risk of nuclear theft.¹ However, when systematically examining the existing evidence, it becomes clear that such fears are highly exaggerated. After proving the unlikelihood of nuclear terrorism originating from Russia, the paper highlights common areas of interest, on which the United States and Russia should focus their cooperation in order to more adequately deter the acquisition of nuclear weapons or material by terrorist organizations.

Proving the Unlikelihood of Nuclear Terrorism Originating from Russia²

Since 1991, programs aimed at consolidating the nuclear weapons of Kazakhstan, Belarus, and Ukraine to Russia have proven to be very effective and consolidation within Russia of approximately 30,000 nuclear warheads has successfully taken place.³ After significant reductions under the provisions of the 1991 Strategic Arms Reduction Treaty (START) and the 2002 Strategic Offensive Reductions Treaty (SORT, also known as the Moscow Treaty), as of May 2010, Russia's nuclear arsenal amounts to a total of 2,600 strategic warheads and a total inventory of approximately 12,000.⁴ Regardless of this progress, Russia remains the

¹Matthew Bunn. 2010. *Securing the Bomb 2010*. Cambridge, Mass., and Washington, D.C.: Project on Managing the Atom, Harvard University, and Nuclear Threat Initiative, April, p. 27.

²This section is based on Tsvetkova, Bilyana. 2010. Disproving a Conventional Wisdom: Why Nuclear Terrorism Originating from Russia is a Myth. *Security Index*, April. For more detailed information, please refer to the aforementioned article.

³Graham Allison. 2004. "Nuclear Terrorism: How Serious a Threat to Russia?," *Russia in Global Affairs online edition*, September/October.

⁴Federation of American Scientists. 2010. *Status of World Nuclear Forces*

country possessing the world's largest amount of nuclear weapons and materials, located in the world's largest number of bunkers and buildings, which are estimated at approximately 250. Many experts believe that these nuclear weapons and material are still susceptible to theft mainly because of inadequate security at storage sites, corruption and vulnerability during transportation of nuclear material from one site to another.⁵

Although there is room for improvement, a systematic analysis of the existing evidence shows that the fear of nuclear terrorism, originating from Russia, due to a combination of factors – including but not limited solely to the recent dramatic enhancement of nuclear site security – is exaggerated. Acquisition of nuclear material from Russian territories is unlikely for the following reasons: (1) improved supply security in Russia; (2) lack of established trafficking networks; (3) insufficient demand; and (4) difficulties in using nuclear material to produce and employ nuclear weapons.

First, international initiatives and aid programs spearheaded by the United States have been largely effective in bolstering the security and storage of Russian nuclear weapons and nuclear material. Programs such as those emplaced by the U.S. National Nuclear Security Administration (NNSA), the U.S. Department of Energy (DOE) and the U.S. Department of Defense (DOD), agreements between U.S. and Russian presidents and initiatives such as the “Megatons-to-Megawatts” program have greatly reduced the likelihood of smuggling nuclear materials by securing the nuclear material and weapons sites within Russia and on the territory of all Former Soviet Union (FSU) states. By the end of 2009 as much as 92 percent of the buildings that contain weapons-usable nuclear material on the whole territory of all FSU states have been secured. By the end of 2009, these programs have achieved almost full success in upgrading the security of the Russian nuclear facilities. Security upgrades have been successfully completed at an overall of 97 sites with nuclear warheads out of the total estimated 110-130 sites.⁶ Therefore, the U.S. budget requested for these programs for fiscal year 2010 has decreased. It is projected that in the future the funding for these projects will experience gradual and steady decline as the planned work in Russia is close to completion.⁷ Furthermore, under the recently signed revived 2010 START treaty Russia and the United States are limited to less than 1,550 strategic warheads. This figure is 74 % lower than the limit of the 1991 START Treaty.⁸ Additionally, since the end of the Cold War, Russia has had effective monitoring mechanisms in place but they are occasionally ill-understood and underestimated by U.S. experts seeking to safeguard Russian nuclear material.⁹

Second, there is no evidence to support the claim that an established and stable trafficking network designed to smuggle nuclear weapons or material out of Russia exists. There is no proof of Russian organized criminal activity in this area as most attempted trafficking is undertaken by amateur individuals who are relatively inexperienced and unsuccessful.¹⁰ Illicit trade of this nature involves substantial risk

<http://www.fas.org/programs/ssp/nukes/nuclearweapons/nukestatus.html> (accessed May 3, 2010); Nuclear Threat Initiative, *Russia Profile, Introduction*. http://www.nti.org/e_research/profiles/Russia/index.html October 2009 (accessed May 3, 2010).

⁵ Bunn 2010, pp 33 - 35.

⁶ Bunn 2010, p. 33.

⁷ Andrew Newman and Matthew Bunn. 2009. *Funding for U.S. Efforts to Improve Controls Over Nuclear Weapons, Materials, and Expertise Overseas: A 2009 Update*. Cambridge, MA, and Washington, D.C.: Project on Managing the Atom, Harvard University, and Nuclear Threat Initiative, June 2009, pp. 3-5.

⁸ *The White House Blog*. 2010. The New START Treaty and Protocol. <http://www.whitehouse.gov/blog/2010/04/08/new-start-treaty-and-protocol> (accessed May 05, 2010).

⁹ For more detailed information, please refer to Tsvetkova, Bilyana. 2010. Disproving a Conventional Wisdom: Why Nuclear Terrorism Originating from Russia is a Myth. *Security Index*, April.

¹⁰ International Atomic Energy Agency (IAEA). 2007. *IAEA Database on Illicit Trafficking (ITDB), Fact Sheet Figures 2007*.

and opportunity costs leading to an apparent unwillingness on the part of established smugglers to enter this unprofitable and risky business.

Third, the demand side of this equation seems to be quite weak. According to existing evidence and analysis, there appears to be only a limited number of states, groups or individuals worldwide who desire to purchase nuclear weapons or material, and little conventional wisdom on how to proceed in any attempt to acquire such material.¹¹ Additionally, much of the perceived demand side consists of state police and intelligence services conducting sting operations in an effort to prevent the flow of nuclear materials. The historical record shows that there is not one single reported case of a nuclear weapon having changed hands for money.¹² Though the A.Q. Khan network was active during the 1970s and 1980s in supplying information, technology, and equipment necessary to conduct uranium enrichment to governments willing to pay for it, this is very different than acquiring and selling a nuclear device, something that even this network did not do.¹³ It is often said that the International Atomic Energy Agency's (IAEA) confirmed cases represent only a minute picture of the reality of the trafficking situation and that we should fear what we do not know. However, an evenhanded approach demands that we review the existing facts and information in an attempt to avoid exaggeration of such fears.

Fourth, would-be nuclear terrorists face significant obstacles in seeking to produce and employ nuclear weapons. Though many experts claim that it is not hard to construct a nuclear device, this does not seem to be a compelling argument when one considers that potential terrorists would only have access to much of the necessary knowledge and equipment in the event of having a state sponsor willing to assist in the development of such weapons. It is unlikely that any democratic state would view the benefits of harboring a terrorist group on its territory, and assisting such a group in developing a nuclear device, as outweighing the costs imposed by the international community once such a device is employed and, ex post, linked to the aforementioned state. This logic is confirmed when reviewing the existing nuclear terrorist record. No terrorist organization is believed to currently have the intellectual capability to build a nuclear device, not even the infamous Al-Qaeda.¹⁴ In fact, the Japanese terrorist group, Aum Shinrikyo attempted to enrich uranium itself in Australia in 1993, but eventually failed and abandoned the project due to the insurmountable technical challenges involved in this process.¹⁵

Highlighting Areas for U.S. – Russian Cooperation

Although both nuclear theft and support for nuclear terrorism by a democratic nuclear state are unlikely, a support by a like-minded nuclear state is another scenario that raises serious concerns. With the help of a country which could provide a readymade bomb to Al-Qaeda or Chechen terrorists, the danger of nuclear terrorism emerges as an alarming possibility threatening both the United States and Russia. Hence it is in the interest of both states to prevent the possibility of state-sponsored nuclear terrorism. Iran is the main country, ideologically sympathizing with terrorist

http://www.iaea.org/NewsCenter/Features/RadSources/PDF/fact_figures2007.pdf (accessed May 05, 2010). Rensselaer Lee. 1998. *Smuggling Armageddon: The Nuclear Blackmarket in the Former Soviet Union and Europe*. New York: St. Martin's Press, pp. 15-19.

¹¹ IAEA 2007, John Mueller. 2006. *Overblown: How Politicians and the Terrorism Industry Inflate National Security Threats, and Why We Believe Them*. New York: Free Press, p. 25.

¹² IAEA 2007.

¹³ Gordon Corera. 2007. *Shopping for Bombs: Nuclear Proliferation, Global Insecurity and the Rise and Fall of the AQ Khan Network*. New York: Oxford University Press.

¹⁴ Bunn 2010, p. 22.

¹⁵ Charles D. Ferguson. 2006. "Preventing Catastrophic Nuclear Terrorism," *Council on Foreign Relations Special Report*, March 11, p. 5.

agendas, on which Russia and the United States may currently focus their collective efforts. Iran is of particular importance because it is the most active state sponsor of terrorism.¹⁶ Its support for Taliban fighters in Afghanistan and other terrorist organizations in the region has been widely claimed.¹⁷ Iran has also been suspected of aiding Syria, which built a nuclear reactor that was destroyed by Israeli bombardment in 2007. North Korea is also an essential case to address because, like Iran, it has already been suspected of selling nuclear material to like-minded states, which makes it a likely candidate for selling nuclear material or weapons to a terrorist organization. For instance, North Korea has allegedly sold bomb-usable plutonium to Syria.¹⁸ Although selling weapons to terrorists is not identical to selling weapons to states, the publicly available information about the nature of the North Korean leadership is not enough to dismiss such fears.

*Iran*¹⁹

In the case of Iran, the United States and Russia may focus on modifying the currently imposed sanctions tool in order to prevent unintended damage to civilians and enhance the sanctions' efficiency. According to their design, the currently imposed Iranian sanctions theoretically represent a paragon of a targeted regime, characterized by two main elements: (1) minimal humanitarian damage on innocent civilians and (2) limited scope. However, in practice, the imposed sanctions have not achieved their initial purpose – the suspension of “all enrichment-related and reprocessing activities.”²⁰ Moreover, they have significantly damaged Iran's civilian population.

First, it is well-known that until this moment, the currently imposed sanctions have not forced Iran to terminate its nuclear program. Regardless of the sanctions imposition, as stated in the latest briefing by the Chair of the Sanctions Committee from March 2010, Iran has continued to develop its nuclear proliferation program.²¹ Under the sanctions imposition from 2006 to May 24, 2010, Iranian centrifuges used for the enrichment of uranium to levels appropriate for both civilian and military use, increased by a startling 1,300% from 656 to 8,528.²² In light of the latest discoveries, the IAEA estimates that between November 23, 2009 and May 1, 2010, Iran has fed 6,436 kg of uranium to the Iranian centrifuges, which have generated 581 kg of LEU product and 5,785 kg toxic waste.²³ Consequently, based on the already produced amount, Iran has reportedly accumulated enough low-enriched uranium for two nuclear bombs.²⁴ According to expert assessments, under certain conditions Iran can

¹⁶ Katzman, Kenneth. 2009. *Iran: US Concerns and Policy Responses*. Congressional Research Service, 14 April, p. 17; Bipartisan Policy Center. 2008. *Meeting the Challenge: U.S. Policy Toward Iranian Nuclear Development*, September.

¹⁷ Katzman, Kenneth. 2010. *Iran: US Concerns and Policy Responses*. Congressional Research Service, 1 April, p. 30.

¹⁸ *The Economist*. 2010. “The future of non-proliferation. An awkward guest-list”, April 29.

¹⁹ This section is based on Tsvetkova, Bilyana. 2010. “How Targeted are the United Nations Security Council Sanctions Imposed on Iran's Nuclear Proliferation Program?” *Paper presented at the annual meeting of the Theory vs. Policy? Connecting Scholars and Practitioners, New Orleans Hilton Riverside Hotel, The Loews New Orleans Hotel, New Orleans, LA*, Feb 17. For more detailed information, please refer to the aforementioned article.

²⁰ UNSC. 2006. Resolution 1696. 31 July 2006, Article 2.

²¹ UNSC. 2010. *Briefing to the Security Council by the Chairman of the Committee established pursuant to resolution 1737 (2006)*. S/PV.6280, p. 3.

²² Iran Watch. 2010. *Iran's Nuclear Timetable*. Washington: Wisconsin Project on Nuclear Arms Control. <http://www.iranwatch.org/ourpubs/articles/iranucleartimetable.html> (Accessed June 21, 2010)

²³ IAEA. 2010. *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran*. GOV/2010/28. May 31, p. 2.

²⁴ Iran Watch 2010.

upgrade the necessary amount of LEU to U-235 for a nuclear bomb in four weeks or even less.²⁵

Second, the sanctions have imposed unacceptable damage on the Iranian civilian population. They forbid imports to Iran of the vital isotope technetium-99, necessary for cancer treatment and treatment of other deadly diseases. Iran's supplies of this indispensable material are currently close to depletion, which endangers the lives of approximately 850,000 Iranian citizens.²⁶ Moreover, the sanctions greatly harm the civilian population indirectly by creating a significant reputational damage not only on the government but also on the whole Islamic Republic. This has triggered an active campaign by European states against trade with Iran. As a result, Western countries and entities, concerned about their reputation, have reduced or completely terminated their relations with the Islamic Republic. This has contributed to a short-term decrease in trade with major partners, increase in the overall cost of exports and imports, and a significant decline of needed foreign investments, particularly for the development of the aged Iranian oil fields. Due to these negative effects, the Iranian economy has experienced a considerable transformation. Both the Iranian citizens and the Iranian government have developed coping mechanisms to manage with the increasing isolation by developing an underground economy and diversifying their trade partners.²⁷

The sanctions impact so far clearly demonstrates the vital need for an improvement of the current sanctions tool. The United States and Russia can focus their efforts on drafting a more efficient and less harmful sanctions regime, which both states endorse and adhere to.

In addition, to bring about Iran's agreement to cooperate with the IAEA and resolve the international crisis, the two states may focus on enhancing their mutual diplomatic efforts and reforming the incentive package to Iran. Such efforts should be supported by the United States but spearheaded by Russia, with whom Iran has more favorable relations. Such incentives may include lifting of the international sanctions, in case the latter are not modified with mutual consent, as well as slackening of the unilaterally imposed U.S. sanctions present since 1979.

North Korea

Nuclear North Korea is another area of potential cooperation between the United States and Russia. Like in the case of Iran, the sanctions tool imposed against North Korea's nuclear program has been highly ineffective in achieving nuclear disarmament. Although the available data is scarce, there is enough evidence to prove that the impact of the UNSC targeted sanctions on North Korea's nuclear program was incremental and did not result in a significant change in North Korea's pursuit to develop nuclear weapons.

The initial UNSC sanctions did not have any effects on the ban on imports of luxury goods to North Korea or its trade relations with China and South Korea, its two main trade partners.²⁸ Additionally, the second UNSC resolution 1874, which explicitly emphasized in Article 19 that states should reduce their current business

²⁵ Bipartisan Policy Center. 2008. *Meeting the Challenge: U.S. Policy Toward Iranian Nuclear Development*. Washington: Bipartisan Policy Center, pp. iv-v.

²⁶ Erdbrink, Thomas. 2010. "UN Sanctions Hit Hospitals: Iran Running Out of Life-Saving Isotopes." *Spiegel*, January 6.

²⁷ Fassihi, Farnaz and Chip Cummins. 2008. "Cat and Mouse: Iranians Scheme to Elude Sanctions." *The Wall Street Journal*, February 13; IMF (International Monetary Fund). (2009) *IMF Direction of Trade Statistics Yearbook*. Washington: IMF.

²⁸ Haggard, Stephan, and Marcus Noland. 2008. *North Korea on the Precipice of Famine*, Policy Brief, Peterson Institute for International Economics, May, p. 238; Noland, Marcus. 2009. 'The (Non) Impact of UN Sanctions on North Korea', *7 Asia Policy*, pp. 69-70.

with North Korea, did not affect the trade relations with China, which recently increased its trade with the North.²⁹

North Korea has so far conducted two nuclear weapons tests in October 2006 and May 2009. The country is believed to have sufficient fissile material for approximately ten nuclear weapons as of February 2010.³⁰

In the case of North Korean U.S. – Russian cooperation may follow a similar patten as in the Iranian case. The two states can work in partnership to modify the sanctions tool and may unify their efforts in persuading South Korea and China to adhere to the sanctions regime and exert pressure on North Korea. Improvements to the sanctions tool can certainly be accompanied by a refined incentive package, including further humanitarian aid and proposal for enhanced economic relations with North Korea.

Conclusion

In light of the current economic crisis and funding shortages, the responsibility to protect and safeguard the population from nuclear terrorist attack requires a better allocation of resources, based on a more relevant and accurate assessment of the current high-priority threats. As Russian stockpiles have been adequately secured, to prevent nuclear terrorism, Russia and the U.S. have to focus their cooperation on extraterritorial concerns of more acute nature. In particular, the two countries may focus on preventing the potential scenario of Iran or North Korea selling nuclear bombs to terrorists. This requires a meticulous examination and modification of the currently imposed sanctions regimes, combined with a painstakingly crafted incentive packages that both the U.S. and Russia fully endorse. Such commonly agreed upon and adhered to approach will provide a strong incentive for Iran and North Korea to comply with international nuclear security and will consequently minimize the threat of nuclear terrorism that endangers both the U.S. and Russia. With the two powerful states united behind a common strategy, the threat of nuclear terrorism is undoubtedly preventable.

Full text of article will be published if the upcoming issue of the Security Index journal

²⁹ UNSC Res. 1874, 12 June 2009; Gordon G. Chang. 2009. "Beijing Is Violating North Korean Sanctions," *The Wall Street Journal*, 15 October.

³⁰ Nuclear Threat Initiative. 2010. "North Korea Profile: Nuclear Overview." (last updated February 2010). http://www.nti.org/e_research/profiles/NK/Nuclear/index.html (accessed May 8, 2010)