

U.S. – Russian Missile Defense Cooperation Limits of the Possible

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President Vladimir Putin's decision not to overreact to the December 2001 U.S. withdrawal from the Anti-Ballistic Missile (ABM) Treaty paved the way to recovering from the painful and acrimonious debates about the fate of the treaty. However, time was needed to heal the wounds that U.S. unilateral decisions had inflicted on U.S.-Russia relations. Only in May 2003 did Russia decide to cooperate with the United States on strategic missile defense. Since then, discussions have become more practical.

Bilateral Interest?

Is it practical to expect that Russia will help the United States to build up its missile defense, given that prospects for robust large-scale defense, albeit remote, would eventually undermine Moscow's strategic nuclear deterrent? There are several reasons for Russia to do so. First, as a result of such cooperation, bilateral political relations would improve. U.S.-Russian missile defense cooperation would be the most noteworthy symbol that the role of deterrence in relations between the two nuclear superpowers has been drastically marginalized, and would no longer determine their broader political links. There is a paradox: Russia's contribution to U.S. missile defense could eventually affect bilateral strategic stability in its traditional Cold War sense. But it might help to remove U.S.-Russia relations from the purely Cold War type deterrence paradigm. As a result, the logic of strategic stability would not apply anymore to U.S.-Russian relations as it does not apply, for example, to the U.S.-British and even the U.S.-French relationships.

Such cooperation is also in Russia's interests. In broader terms, the Russian government started to realize that, since the collapse of the Soviet Union, its smaller and market-oriented economy cannot bear the burden of maintaining the whole spectrum of military technologies at international standards. Therefore, international cooperation in the military industrial area has become integral to Russia's attempts to keep its leading position in military technologies. In the field of missile defense this might mean that, in the absence of political will to spend significant domestic resources, the only opportunity to maintain cutting edge technology would be through international cooperation. Certainly Russia has obtained some experience in developing new military technologies by using funds from arms sales and direct investment from a few Third World countries.

Nevertheless, access to modern U.S. technology has been considered for a long time as a key issue for the country's modernization.

There are probably three main reasons that the United States is interested in cooperating with Russia in the area of missile defense. First, involving Russia—only recently a key opponent to the abrogation of the ABM Treaty—could help to alleviate international criticism in many capitals.

Second, the Missile Defense Agency expressed its interest in having access to some Russian technologies. Reportedly, the United States has delivered a list of ten technologies in which Washington might be interested. A similar list is expected from Moscow. In its decades of intensive research, development, and testing, as well as operating the world's only deployed strategic ABM system, Moscow accumulated know-how and expertise, access to which—even after a decade of military industrial decline—could provide the United States with a cheaper option than the indigenous development of missile defense technology in the United States.

Third, Russia's territory, together with Russian-controlled early warning assets located in former Soviet territory, could significantly enhance the detection, targeting, and even hitting capabilities of a U.S. missile defense system, should the Russians agree to provide their territory and assets for U.S. activities of that kind. In fact, Russian assets could become the first echelon of U.S. missile defense, but this would require a political decision. For instance, missiles flying to U.S. targets from the Persian Gulf would pass a segment controlled by Moscow's ABM system. After modernization, the system could probably be used for intercepting those missiles. If progress in the boost-phase defense could be achieved, Russia's south and the Caspian Sea might become an area from which it would be more cost-efficient to hit, for example, Iranian missiles flying to the United States over the North Pole, than if the U.S. interceptors were deployed in the Persian Gulf. In a similar way, the area around Vladivostok could be used for deploying interceptors against North Korean missiles flying to some North American targets.

Thus, both Moscow and Washington are interested in cooperation. It might be concluded, though, that the United States possesses here more pragmatic and near-term interests, while for Russia this could be a question of the survival of a critical segment of its defense industry. Only by involving Russia in significant missile defense cooperation could the United States credibly expect that a competing source of relevant technologies from Russia would not emerge in the foreseeable future. If attempts to cooperate with the United States did not meet expectations, Moscow could still find non-U.S. sources for funding international missile defense projects. This might mean that Russian missile defense enterprises could develop and build systems for a third country.

Obstacles?

The U.S.-Russian dialogue on missile defense cooperation faces two sets of problems: tactical, linked to differences in negotiating positions, and more fundamental ones related to the status of relations and asymmetries in threat perceptions. So far, tactical disagreements have handicapped the existing dialogue. Russia has insisted that to commence military cooperation with the United States, a bilateral intergovernmental agreement on military-technical cooperation must be concluded, along the lines of what

Moscow has signed with several other countries. Otherwise Russian companies participating in missile defense projects could face administrative or criminal prosecution for leaking sensitive technologies. The United States, however, has no precedent of such agreements with foreign states.

Russia also wanted to conclude an agreement on intellectual property rights that would regulate technologies and hardware it could provide to the United States. The U.S. side, while insisting that Russia respect similar U.S. rights vis-à-vis the technology that could be provided to Moscow, hesitates to limit its own freedom of action over Russian deliveries. Beyond that, routine disagreements over taxation, customs tariffs, and liabilities have undermined implementation of the Russian-American Observation Satellite (RAMOS) program and Joint Data Exchange Center (JDEC), two projects that should be major achievements of the U.S.-Russian interaction in areas related to missile defense.

There are also more fundamental obstacles. First, Russia is not willing to contribute sizable resources for developing its own missile defense. Therefore, Moscow might not be interested in participating in joint projects that would require a substantial financial contribution.

Second, the United States expressed interest in providing Russia with technologies that, although not the latest for the United States, are above existing Russian standards. However, Moscow hesitated to accept such offers since it would deprive the Russian defense industry with domestic governmental orders for developing similar technologies. For instance, there was a plan to deliver U.S. infrared sensors for maintaining the efficiency of Russia's space-based early warning system. Russian industry opposed the plan and, as a result, the project has not been implemented.

Third and more importantly, in the early 1990s, each side conducted a preliminary threat assessment against which potential joint missile defense could be targeted. The discussion demonstrated significant political disagreements in between the attitudes of Moscow and Washington toward various states. The countries considered by the United States as threatening were not considered by Moscow in that way.

Fourth, the idea of using Russian territory as the potential forward tier of a U.S. missile defense system has significant practical limits. For the United States, it would be difficult to rely on Russian missile defense capabilities for hitting adversarial missiles flying over Russian territory without having launch control over them. But for Moscow it would be equally difficult to give the United States even the second key to its ABM launchers. Furthermore, hitting possible WMD equipped missile flying over Russian territory to another destination would be self-detering: as a result of the interception, debris from the destroyed missile would fall on Russian soil, possibly leading to toxic, radioactive, chemical, or biological contamination. Under certain deployment modes, a missile's nuclear warhead could explode on contact, and the resulting electro-magnetic pulse would damage the electrical systems over a vast area. On the other hand, nothing would happen should the missile be permitted to pass further toward its non-Russian target.

It is highly unlikely that, under recent circumstances, Russia would allow the United States to deploy its own interceptors on Russian soil. There is simply no historical

precedent for the stationing of independently commanded foreign troops with the permission of the government. Moscow would also likely face a negative reaction from its southern and/or near neighbors, with whom Russia tries to maintain good neighborly relations and to whom an explicit U.S. military presence would be offensive. Finally, such a deployment could itself invite missile attacks, perhaps with WMD warheads, on Russian targets.

What Could Be Achievable?

In the near term, Russian defense companies could be available as subcontractors to the U.S. missile defense program. Through this, the United States could gather cheaper expertise and existing know how for building up its own defense. This would allow the Russian government to keep the missile defense sector of its military industrial complex afloat until the Kremlin has both sufficient resources and the political will to pursue its national missile defense programs.

Cooperation is also possible in exchanging early warning data on adversarial missile launches. The United States could enjoy a longer warning time and better tracking data about incoming missiles if Russia provides the United States with information from their national early warning system. As mentioned above, the system is located close to areas of potential launches, and during a missile's flight over Russian territory, valuable tracking data could be collected. The information would increase the kill probability of the potential U.S. system.

In the near future, cooperation between Russia and the United States in missile defense research and development could start. Hypothetically, the research might include the following areas:

- Analyzing the background of a target in optical, infra-red, and ultra-violet diapasons;
- The problem of target detection, selection, and filtering;
- Issues of precise target tracking, receiving trajectory data, and the algorithm of its processing;
- The architecture of command and control, and compatibility of systems;
- Target destruction and kill assessment;
- How to deal with possible chemical, biological, and nuclear damage resulting from destroying WMD warheads.