High-precision long-range conventional systems and their impact on strategic stability

Andrey Baklitskiy

Strategic stability in its classical sense – understood as a state of US-Russian relations under which neither side has incentives to launch a first nuclear strike – was developed during the Cold War. Such
stability is achieved by "seeking agreements that improve survivability, remove incentives for a nuclear first strike and implement an appropriate relationship between strategic offenses and defenses". Development of new types (and improvement in existing ones) of conventional systems (including high-precision long-range missiles, hypersonic systems and space based missile defense) directly influences the strategic stability. Significant shift in the balance of power between Moscow and Washington could undermine the stability, making nuclear conflict more likely.

Key findings

- **Existing arsenal of US high-precision long-range conventional systems doesn’t give Washington the capability for a successful counterforce strike against Russian strategic nuclear forces.** At the same time, US withdrawal from the INF treaty and probable deployment of intermediate range ground-launched cruise and ballistic missiles in the proximity of Russian borders (primarily in Europe but also in Asia) adds additional threat to Russian strategic forces. The scope of the threat will depend on the types, quantity and deployment areas of US missiles, but in any case, it will result in weakening of strategic stability, which in turn would produce Russian countermeasures further heightening the tensions. With this in mind, a moratorium for deployment of all ground launched INF range missiles seems like the best of the existing options.

- **"Hypersonic" technologies will have mixed impact on the strategic stability.** Russian boost glide vehicles (BGVs) are intended to be used as a new type of ICBM warheads with the goal to deliver the nuclear payload to enemy’s territory evading existing and perspective missiles defenses. To the extent this nullifies effects of defensive weapons it could be seen beneficial to the strategic stability. Moscow also doesn’t
aim at creating global missile defense system to protect the country from a nuclear strike, so Washington’s development of similar capabilities shouldn’t affect security of Russia. However, the development of Russian "hypersonics" is used to justify investments to speed up development of similar systems in the US. There is no certainty which systems US ends up with, but as far as we can tell those will have shorter range, higher precision and conventional payload, which will make them similar to other US high-precision long-range conventional missiles systems. Unlike Russian systems, their US "cousins" will be meant to be used in conventional conflicts bringing with them uncertainty about their payload and trajectory. Depending on their numbers and area of deployment they could be used against Russian nuclear forces and infrastructure, which will decrease strategic stability.

- **Deployment of missile defense interceptors in space still isn’t widely supported by both US expert community and political elites.** This can result in slowing down or completely ending the development of such systems even though the current administration is generally supportive of placing weapons in outer space. If the development continues, the price of such programs would (at least initially) push Washington towards development of a smaller satellite constellation with limited capabilities for exoatmospheric interception of ICBMs, which wouldn’t be much different from existing US missile defense systems.

- **However, the fact that the development of new technologies would not be able to threaten Russian second-strike capability, will not be enough to sustain the strategic stability if the potential adversary has the illusion that it has such a capability.** President Trump’s 2017 statement that US missile defense system has a 97% effectiveness was met with an understandable concern about the decisions that commander-in-chief can make based on flawed estimates. This highlights the importance of high-quality analysis regarding the strategic stability as well as public awareness campaigns.

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About the Author

Andrey Baklitskiy is a consultant at PIR Center, a researcher of the Center for Global Trends and International Organizations of the Diplomatic Academy of the Russian Foreign Ministry. Graduated from the Faculty of the International Relations of the Urals Federal University. Holds specialist degree in regional studies and simultaneous interpreter diploma. In the years 2008-2009 took a course at the University of Seville (Spain). PIR Center intern in May-July, 2011. In 2011-2013 PIR Center Internet Project Director, Information Program Director since 2013. In 2014-2017 PIR Center "Russia and Nuclear Nonproliferation" Program Director. Took part in the sessions of the NPT Preparatory Committee in 2013-2014. Editor of PIR Center White Paper "Ten Steps toward a Weapons of Mass Destruction-Free Zone in the Middle East". The sphere of scientific interest includes international security, bigger Middle East, nuclear energy sector and nonproliferation.

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