Russia’s State Armaments Program 2020
IS THE THIRD TIME THE CHARM FOR MILITARY MODERNIZATION?

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For the first two years of the Russian military reform program that began in October 2008, the top priority of the Ministry of Defense was reorganization. This involved the transformation of the military’s division-based structure into one based on brigades, as well as a shift in the ratio of officers to enlisted soldiers in favor of the latter. The last step of this reorganization was the replacement of military districts with four operational strategic commands, modeled on the U.S. military’s regional commands. These are joint commands that control all of the forces on their territory, including naval and air force units.

As this organizational transformation was being completed, top defense officials increasingly focused on the need to rearm the newly streamlined Russian military. In several speeches last winter and spring, President Dmitry Medvedev called for large-scale rearmament. More specifically, in a March 5 speech to the Defense Ministry Collegium, he called for renewing arms and equipment at a rate of 9 to 11 percent per year for the next decade, in order to reach a target of modernizing 70 percent of military equipment by 2020.

This will be a difficult target to achieve. The current rate is less than two percent; even the Soviet military of the 1980s averaged only a 5-7 percent renewal rate. In order to achieve this plan, the Russian government is putting together a new State Armaments Program for 2011-2020 (SAP-2020). This program will replace two earlier programs enacted since Vladimir Putin came to power, the most recent for the period from 2007 to 2015. What the previous programs have all had in common is that in each case the government failed to achieve the program’s stated goals.

SAP-2020: What We Know So Far
The SAP will not be announced until later this fall, but some information about its parameters has already begun to appear in the Russian press. The total size of the program is still under negotiation. Back in May, President Medvedev announced that total spending on armaments over the next ten years will be 13 trillion rubles, or approximately $425 billion at current exchange rates. This would be a significant
increase from the previous armaments program, which allotted five trillion rubles over a nine-year period. However, Defense Ministry officials argued that this amount would not be sufficient to modernize the entire military. General Oleg Frolov, the acting chief of armaments, noted that for 13 trillion rubles the ministry would be able to modernize only the strategic nuclear forces, the air force, and air defenses. To modernize the ground forces, an additional 15 trillion would be necessary, while the modernization of the entire military (including the navy and the space forces, which operate Russia’s military satellites) would cost a total of 36 trillion rubles ($1.2 trillion).

The definitive program budget will not be announced for several more months, though it seems impossible for the Ministry of Defense to obtain anywhere near the full amount it seeks. In late September, Defense Minister Anatoly Serdyukov announced that total spending for the armaments program would equal 22 trillion rubles, of which 19 trillion would be allocated to the Ministry of Defense and 3 trillion to other power ministries. This would increase Russian defense spending to around 3.5-4 percent of GDP, up from the current 2.9 percent.

**The Air Force**
The full parameters of the armaments the Russian military will procure with this money have also not been announced, though some specifics are now available. The air force will be one of the main beneficiaries, while the navy and ground forces are considered a lesser priority. The Ministry of Defense believes it can modernize all of the country’s military aircraft over the next ten years. The goal is to purchase 350 new fighter airplanes, 1,000 new helicopters, and a number of new transport aircraft. This is a high priority as most of the existing aircraft have reached or exceeded their original lifespan. Specific air force procurement plans include:

- **T-50 fifth-generation fighter aircraft (PAK FA).** Ten to be purchased in 2013-2015. An additional 50-60 to be procured in 2016-2020.
- **Next-generation long-range bomber (PAK DA).** Design began in 2010. Prototype to be built by 2015. First units scheduled to enter the air force in 2020.
- **Su-35BM fourth-generation fighter aircraft.** Forty-eight to be purchased in 2010-2015.
- **Su-34 fighter-bomber.** Thirty-two to be purchased in 2010-2015.
- **MiG-35 fighter.** Currently in development. First units expected to enter the air force in 2013.
- **Yak-130 training aircraft.** One hundred fifty to be delivered in 2010-2015. An additional fifty to be procured in 2016-2020.
- **An-70 transport aircraft.** Sixty to be purchased in 2011-2020.
- **Mi-26 transport helicopters.** Exact number unknown. Main focus of helicopter renewal program.
Air Defense and Strategic Rocket Forces
The armaments program also promises significant improvements in air defense and strategic rocket forces. For the former, Russia will continue to procure the S-400 air defense system. Two air defense regiments were armed with this system prior to 2010. An additional five were to be procured this year. The goal is to have as many as 23 regiments (of 8 to 12 missiles each) by 2015. It will then be augmented by the more advanced S-500 system, currently under development and expected to be ready for production by 2013. Both the S-400 and S-500 systems are superior to the U.S. Patriot PAC-3 in maximum speed, range, and accuracy. Russia will also continue to procure the Pantsir-S1 short-range surface-to-air missile, with at least 200 units expected to be added by 2016 to the 10 already in service in 2010.

The strategic rocket forces will continue to receive Topol-M (SS-27) and the new RS-24 ICBMs. The latter is a Topol-M variant with three or four multiple independently targetable reentry vehicles (MIRVed) that began to be deployed this year. These will gradually completely replace the older SS-18 and SS-19 ICBMs, as the service life of these missiles is scheduled to expire over the next ten years.

The Navy
The procurement plans for the navy seem quite extensive, but are likely to be carried out in full only if the Ministry of Defense succeeds in its effort to increase the government’s total financial commitment to the State Armament Program. The strategic submarine force remains a priority for the military and will be funded no matter what. Financing for other projects, especially the larger and more expensive ships, is more uncertain, though the commander of the navy recently announced that the construction of a total of 15 ships and diesel submarines for the Black Sea Fleet will be part of the armament program. Specific plans include the following:

Submarines
- Borei-class ballistic missile submarine. First currently in sea trials. Five to seven more to be commissioned in 2010-2017. Three of these are already under construction. The project’s success will depend on the military’s ability to get the Bulava SLBM to fly successfully.
- Yasen-class multi-purpose attack submarine. First launched in June 2010. Two to five more to be commissioned by 2020.
- Lada-class diesel submarines. First commissioned in April 2010. Two to seven more to be commissioned by 2020.
- Improved Kilo-class submarines. If problems with the Lada-class submarines continue, as many as eight of these could be built instead, with at least three going to the Black Sea Fleet. There is also the possibility that a smaller number of these would be built to be used in conjunction with a small number of Ladas.
Surface Combat Ships

- Aircraft carrier. This summer, the navy announced that designs for a new aircraft carrier would be finished this year. It is likely that the construction of one or two carriers will be included in the State Armaments Program. Their actual construction is likely to take many years in the best of circumstances, and it is highly unlikely that the Russian navy will have a functioning aircraft carrier by 2020.

- Mistral amphibious assault ships. Two will be purchased from France, with another two to be built in Russia under license. Negotiations over the purchase are still ongoing, but they are likely to conclude successfully in the next few months.

- Ivan Gren-class landing ships. Three to five to be commissioned in 2012-2020.

- New destroyers. Press reports indicate that design of a new 10,000-ton destroyer is under way, with construction of the first ship to begin in 2013. The hope is to build 10 to 12 of these ships over the next 20 years, though it is unlikely that more than two or three could be completed by 2020 in the best of circumstances.

- Admiral Gorshkov-class frigates. Two currently under construction. Plans call for a total of twenty to be built over the next twenty years. Of these, three to six are likely to be built by 2020.

- Krivak IV-class frigates. Given the slow pace of construction for the Admiral Gorshkov frigate, the Russian navy is likely to build three or four of these frigates for the Black Sea Fleet. Previously, these ships have been built for the Indian Navy.

- Steregushchii-class corvettes. First commissioned in 2007. Second launched in March 2010. Three more are currently under construction, to be commissioned by 2013. In total, twenty are expected to built, with ten likely to be completed by 2020.

In addition to these procurement plans, the navy has declared its intention to restore and modernize the various mothballed Kirov- and Slava-class cruisers that it owns. The Kirov-class Admiral Nakhimov (originally Kalinin) cruiser will be the first to undergo modernization. If this effort is successful, the Admiral Lazarev (originally Frunze) may also be modernized prior to 2020. The Admiral Ushakov (originally Kirov) could theoretically be modernized as well, though most sources believe it to be a pile of radioactive rusted metal, due to a combination of a 1990 reactor accident and a subsequent lack of repair or maintenance. The navy may also work with Ukrainian shipbuilders to finish the almost completed Admiral Lobov Slava-class cruiser. If this project goes through, the three active Slava-class cruisers in the navy may also be modernized over the next ten years.

Ground Forces and Other Equipment

Much less is known about procurement plans for the ground forces, in part because they are likely to receive the least amount of new equipment in the next decade. We do
know that the military has canceled plans to procure the T-95 battle tank and will instead continue to purchase T-90 tanks for the foreseeable future. The ground forces will also receive Italian light armored vehicles, probably instead of the BTR-90 armored vehicles that they had previously planned to purchase. They will also continue to purchase Iskander tactical ballistic missiles for its missile brigades, replacing existing Tochka (SS-21 Scarab) missiles in seven more brigades, in addition to the two that have already been rearmed with Iskanders in 2010. It is likely that sometime during the next decade, the design of a new generation of multiple rocket launcher systems will be completed, with some likely to enter service prior to 2020 in place of the currently used BM-30 Smerch systems.

In addition to platforms and weapons, the Russian military will focus on improving its communications capabilities by upgrading its GLONASS satellite system and procuring new digital communications and command and control systems, as well as other high-tech items such as night vision equipment and better IFF (Identify Friend or Foe) systems. Many of these items are likely to be procured abroad or developed with foreign assistance.

**Limitations**

Whatever the actual details of SAP-2020 turn out to be, if the Russian government carries all of them out, it will be the first time such a program is actually implemented in full. Past programs foundered due to three reasons: lack of financing, corruption, and the poor state of the Russian defense industry. All these factors are likely to play a role in limiting the Russian military’s ability to modernize its weapons and equipment over the next decade.

The large increase in funding promised for SAP-2020 may not be sustainable, as it depends on a stable or rising price for oil and natural gas in coming years, which itself depends on the continuation of the current global economic recovery. If government revenues should falter, financing for the military will undoubtedly suffer as well. Even if revenue projections are met, the increase in financing being discussed right now will require a significant shift in government expenditures toward the military despite ever more pressing needs in the civilian sector.

Whether the government will be able to maintain such a plan if its popularity starts to erode in coming years is very much an open question, especially as it becomes ever more obvious to the population that much of the procurement money goes to line the pockets of senior military officials. Various press reports estimate that as much as half of all procurement money is spent on bribes and other forms of corruption. Last spring, the Audit Chamber announced that one billion rubles of military procurement money was lost to corruption in 2009. Analysts argue that, without corruption, 19 trillion rubles would be more than enough to finance the entire defense procurement wish list, rather than the 36 trillion that the Ministry of Defense requested.

However, the real question facing the armaments program is whether the Russian defense industry can actually build the weapons they are being asked to produce. The ability of the Russian defense industry to design and produce new
weapons has been declining for 20 years. The best workers— those left over from Soviet
times when the industry was well funded and a highly prestigious sector in which to
work— have retired or are about to do so. Few good people went into the field in the
1990s, when there was virtually no financing and the industry came close to collapse. At
the same time, because there was no money for equipment modernization, the
industrial plant began to deteriorate. By the start of the Putin presidency, even the
allocation of additional financing was not enough to counteract the decline in the
defense industry’s ability to produce high quality products. This decline will have to be
reversed if the Russian military is to be successful in producing new high-tech military
equipment.