



# BULLETIN

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## The Modernisation of the Russian Army: Too Ambitious for the Local Defence Industry

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*Problems with the implementation of the Russian rearming programme were caused primarily by the failure of the local defence industry. The main challenges that Russia is facing in this area are not only connected with the breaking of cooperation with the Ukrainian defence industry, or with Western sanctions, but also with internal problems such as a lack of qualified young engineers and investment in research and development. Overcoming these difficulties will take time (at least a few years), and will need significant funding from the state budget.*

By ceasing engagement in the work of the joint consultative group on 11 March, Russia completely suspended its participation in the Treaty on Conventional Armed Forces in Europe (in 2007, the Russian authorities introduced a moratorium on the application of this treaty). In theory, this means that Russia is free to increase the amount of conventional military equipment in the European part of the country. In practice, the limited possibilities of the local defence industry present an obstacle to such a step. Such limitations mean the industry is unable to fulfil orders resulting from the Russian rearming programme, due to structural problems, the suspension of cooperation with Ukraine, the imposition of sanctions by Western countries, and the rapid deterioration of the economic situation in Russia. It should also be emphasised that the treaty limits are so high that Russia, even in fully realising the rearming programme, would not be able to reach them.

**The Russian Rearming Programme.** The Russian rearming programme is an integral part of the reform of the armed forces, launched in 2008 by then defence minister Anatoliy Serdyukov. In 2010 it was assumed that within 10 years the military would receive 100 warships, 600 new and 400 upgraded aircraft, 11,000 units of armoured equipment, 14,000 military vehicles, 1,000 helicopters, 56 batteries of the S-400 (NATO: SA-21 Growler) anti-aircraft and anti-missile system, and 10 batteries of S-500 surface-to-air missile systems, the Armata and Kurganets-25 universal combat platforms, and the Boomerang combat vehicle platform, on the basis of which a number of completely new armour systems will be created. Electronic warfare systems need to be modernised too, and the modernisation of Russia's nuclear forces will also be a priority. This latter will include replacing SS-18 Voevoda missiles with Sarmat missiles, the installation of RS-26 Rubezh ballistic missile systems, continuation of the production of RS-24 Yars missiles (NATO: SS-27 Mod 2), resuming supplies of railway combat missile complexes, (successors of the SS-24 Scalpel systems), and production of a new strategic bomber and nuclear submarines. The cost of the whole programme was estimated at \$700 billion. The majority of these contracts should be completed by the Russian defence industry, which includes 1,400 companies representing nine industry branches. Among them dominate holding companies, the largest of which is Almaz-Antey, which was classified by SIPRI in 2014 as the 14<sup>th</sup> largest defence company in the world.

**Threats to the Implementation of the Plan.** A number of problems facing the Russian defence sector call into question the feasibility of this ambitious plan. Deteriorating economic conditions related to the decline in prices for energy resources, as well as the reduction of state revenues and the depreciation of the rouble, at a time when Moscow is maintaining the planned expenditure for the modernisation of the armed forces, threatens militarisation of the budget and the reduction of state spending in other areas (in 2015, Russia will spend approximately one third of its budget on defence). The depreciation of the rouble caused an increase in the price of production by subcontractors.

In 2014, the situation worsened because Ukraine broke cooperation with Russia in the armaments industry, due to the annexation of Crimea and Russian support for separatists fighting in Donbas. At the same time, the U.S. and EU imposed sanctions on Russia, especially connected the transfer of modern technology.

Irrespective of all this, the Russian defence industry has in any case been struggling for years with the technological gap. Lack of government investment in innovation, human resources and research meant that Russia only modernised its existing military equipment, without creating anything new. An example is the Su-35 fourth generation+ fighter (NATO: Flanker E++), which will enter into service in the armed forces in 2015. This is not a new aircraft, but another modification of the Su-27 fighter, which has been in use since the early 1980s. For armoured units, an example is the T-90 tank, which is a modernisation of the T-72B, which also entered into service in the '80s. However, 2015 is the first year in which the army, by receiving the first delivery of tanks using the Armata combat platform, will be equipped with a new combat system developed in modern Russia, and not being only an updated version of equipment produced in the USSR.

**The Challenge to Replace Imports.** The share of foreign components in Russian military equipment was previously approximately 10%, but for the most part they were not essential parts. As part of the import substitution to the end of 2015, Russia planned to start production of 1,070 weapons components, of which 695 were to be produced in cooperation with Ukraine. The scale of the challenge is evidenced by the fact that production of approximately 200 types of weapons and military technology, including helicopter and ship engines, depended on the supply of equipment from Ukraine. Russia will be able to produce turbine engines for ships only from 2018, which will result in significant delays in deliveries of new units to the fleet. Russia has coped better with the production of helicopter engines, which has been taken over by the United Engine-Building Corporation factory in St. Petersburg. In the coming years it should triple production capacity (currently, it turns out 150 engines per year). Neither should Russia have problems with manufacturing parts for the T-90 tank or the Khrizantema-S (NATO: AT-15 Springer) supersonic anti-tank missile, previously produced in Ukraine.

**The Importance of Sanctions.** Sanctions imposed on Russia by the EU and the U.S. have had a quite important effect on the production capacity of the Russian arms industry. Independent estimates indicate that, because of the sanctions, approximately 500 defence companies have suffered. Sanctions have also widened the technological gap, and significantly reduced the possibility of acquiring new technologies, which is important for some companies, especially in the electronics industry, where the share of foreign components was about 25–30% (currently, previously purchased equipment and components are used).

The problem can therefore be replacing imports from outside the former USSR region, especially from France. Such imports include optical equipment including thermographic cameras that are installed in T-90S tanks (that Russia sells mainly to Algeria and India), BMP-3 infantry fighting vehicles, and BTR-80 armoured personnel carriers. France also sold Russia avionics components (inertial navigation systems) for Su-30MK and MiG-29K fighters destined for export. As a result of the imposition of sanctions on Russia, the French company Renault Trucks Defence withdrew from the project to develop the new Atom infantry fighting vehicle in collaboration with the Russian Central Scientific Research Institute Burevestnik, while the Italian state holding shipyard Fincantieri has suspended the project to building the S-1000 small submarine with the Central Maritime Design Office Rubin. At the same time, the German authorities have banned the concern Rheinmetall AG from fulfilling a contract to construct a modern combat training centre at the Mulino training ground near Nizhny Novgorod (the project is currently 90% complete).

**Conclusions.** Established in 2010, the Russian rearming programme assumed very ambitious results that are not feasible, not only due to the crisis in the Russian economy. The challenges that Russia is facing are primarily related to the rise of a generation gap among the scientific and technical personnel who design new military equipment, combined with a lack of modernisation of arms factories, and difficulties in obtaining modern technologies. Despite the economic problems, the Russian authorities will nevertheless try to maintain the level of military spending. At the same time, taking into account the structural problems of the local defence industry, and Western sanctions, it is almost certain that Russia will fail to achieve the level of 70% of modern weapons that the rearming programme assumes. Moreover, it is difficult to expect that, in relation to the money invested, the defence sector will bring significant benefit to the economy.

A result of the sanctions may also be that Russia cannot fulfil foreign contracts for the supply of T-90S tanks and Su-30MK and MiG-29K fighters. Other consequences will be increasing military cooperation with countries such as India and China. The latter is increasingly being considered as a possible source of modern technology.

In the coming years, the challenge for the Russian defence industry will also be to reach a position in which strategic weapons (ballistic missiles) will be produced only in Russia, without the participation of components from foreign suppliers.

Problems with the implementation of the current rearming programme will influence work on the next one, which was planned for this year but has already been postponed until 2018. The new programme will be modified depending on the results achieved under the current one.

In the coming years, Russia will face the increasingly serious challenge of modernisation, not only of its army and equipment, but primarily of the arms industry, to enable it to produce modern weapons both for Russia's armed forces and for export.