





THE DEVELOPMENT OF RUSSIAN MILITARY POLICY AND FINLAND

Stefan Forss, Lauri Kiianlinna, Pertti Inkinen & Heikki Hult

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MAANPUOLUSTUSKORKEAKOULU – NATIONAL DEFENCE UNIVERSITY

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PREFACE

The impulse to this work came in spring 2010 from a respected Swedish colleague and teacher at the Department of Strategic and Defence Studies at the Finnish National Defence University. The radical Swedish defence reorganization and the unilateral declarations of solidarity made by Sweden created a rather opaque situation. The implications and consequences of the adopted policy were difficult to assess.

The views and assessments of Finnish military and security experts are appreciated in Sweden. We accepted the invitation to write this report, which is part of a long-time international cooperation. The authors alone carry the responsibility of the final product.

The authors are greatly indebted to Professor Richard Impola for his voluntary and thorough translation.

Helsinki, March 2013

Stefan Forss Docent, Finnish National Defence University Member of the Royal Swedish War Academy of Sciences

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EXECUTIVE SUMMARY

The powerful revival of geopolitics in world politics is an established fact. Its effects also extend to areas close to Finland. The Soviet Union's withdrawal from its positions in the Warsaw Pact and Baltic countries at the end of the Cold War was the first phase of the change, which simultaneously had a part in shaping Europe's new, so-called cooperative security regime within the framework of the Conference on Security and Cooperation in Europe (CSCE), later known as the Organization of Security and Cooperation in Europe (OSCE).

The second phase, Russia's regaining a position of influence among former Soviet republics, gained impetus halfway through the last decade and reached its peak with the war in Georgia, the collapse of the so-called "Orange revolution" in the Ukraine, and further integration of Belarus into the Russian system. "Russia is seeking to restore its great-power status and considers it very important to alter the decisions of the 1990s, which it deems as unfavourable to Russia".¹

A somewhat adversarial stance has thus re-emerged into the picture, and faith in the Euro-Atlantic security regime has weakened, although the west-ern countries are reluctant to admit that. One indication of that is Russia's attempt to overthrow the most important accomplishments of the OSCE, such as the basic security obligations stated in the *Charter of European Security*, adopted in Istanbul in 1999. In its military doctrine, Russia considers NATO a danger, and NATO in turn considers Russia a partner.

In the 1990's, however, Western Europe began to consider the threat of war such an outmoded idea that it made possible an exceptionally large reduction in the armed forces of NATO and other Western countries, and a change of missions from territorial defence to crisis management. At the same time, the military readiness of countries was substantially reduced.

The internal problems of NATO increased in a situation where the interests of its most important member state, the United States, were more and more strongly focused on Asia and the Pacific. The U.S. economic resources are diminishing, and its fulfilment of various commitments to allies and friends is becoming more uncertain. The actions and attitudes of traditional U.S. allies in Europe are also influencing the matter. The role of the NATO member state Germany is crucial. Germany's Russia policy in particular, but also the policy of France, have raised questions.

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¹ Prime Minister's Office, 2009, p. 40. The next Finnish government White paper, released on 21 December 2012, says that Russia strives for a multipolar world and wants recognition as one of the major actors in world politics. Prime Minister's Office, 2012, p. 30.

Underlying Russia's reform of its armed forces, one can plainly see an effort to respond to different kinds of challenges appearing in different parts of its huge country. Organizational changes required by the times have been made. Heavy and cumbersome divisions have given way to more manageable brigades in the Western fashion. Old military districts (MD's) have been abandoned, and have given way to four operational-strategic combined commands, still called military districts in peacetime. The Western MD was created by combining the Leningrad and Moscow MD's. Its HQ is located in St. Petersburg, which is also a sign of the fact that the center of gravity in the western direction has been displaced from Central Europe toward the northwest.

Steps are being taken to modernize Russia's dilapidated weaponry in comprehensive ways via large and increasingly large appropriations, and in part with the direct support of Germany and France. The armaments program in effect until 2020 has received an equipment appropriation totalling about 20 trillion roubles or approximately 500 billion euro. Extensive start-up of serial production of Russian military equipment is commencing for the first time since the break-up of the Soviet Union.

General conscription will not be abandoned for at least the next ten to fifteen years, which guarantees the country a trained military reserve of several million men, 700,000 of which can be mobilised rapidly. Even if Russia develops her armed forces primarily with local warfare capability in mind and for control of her neighbourhood, she as a last resort, prepares also for a future large-scale war. A large reserve is needed particularly in the eastern direction. It is technically possible to use it as an occupying force.

It is apparent that in the west, Russia needs small, mobile, highly trained and effective strike forces in high readiness, which are able to achieve operational results directly from their peacetime deployments. This vision is the result of new Russian military scientific thinking, which emphasizes the decisive importance not only of the initial period of war, but above all the first strategic strike, including pre-emptive actions.

The forces can be reinforced quickly if necessary. The abandonment of territorial defence in most NATO countries and the increase in preparedness of Russian forces created confusion and uncertainty in countries near Finland and in the eastern parts of Central Europe.

The number of Russian troop units and troop strength in the former Leningrad MD has changed markedly since the dissolution of the Soviet Union. The large decrease that took place in the late 1990s and at the start of this century has changed to an increased capability again.

The current ground forces east and southeast of Finland seem to be under the command of the Russian 6th Army Headquarters. In 2010 a motorized infantry brigade was reported to have been established south of St. Petersburg. It probably is part of the planned high readiness units. At Kamenka on the Karelian Isthmus there is in readiness a motorized infantry brigade which ranks among the elite army units. At Sertolovo, north of St. Petersburg, a brigade is likely to be formed at the supply depot there. A helicopter unit supporting the brigades is also located on the Karelian Isthmus. Among the abundant artillery groups supporting the troops let us mention the heavy rocket launcher brigade, the range of whose weapons is over eighty kilometres.

An especially significant increase in military capability is the stationing of the Iskander-M ballistic missiles, with a range of 450 to 700 kilometres, with the artillery-missile brigade at Luga, south of St. Petersburg. These missiles represent the kind of high precision weapons mentioned in military doctrine, and its range covers, in addition to the Baltic countries, most of Finland. The Iskander-M can be equipped with either a variety of conventional warheads or a nuclear warhead.²

In Russian defence planning, the Iskander missile system is given important roles in various parts of the country as both a nuclear deterrent weapon and an effective offensive conventional weapon. Tactical ballistic missiles and cruise missiles are assuming an increasing operational-tactical role and augment aviation strike forces well. The country's military authorities have great expectations with regard to the Iskander missile system.

In carrying out strategic strikes, the Luga Iskander missile brigade is of fundamental importance. Along with air power, its accurate strikes could be used to suppress any organized defence by opponents, taking advantage of their lack of readiness.

In the Pskov area, an airborne assault division is deployed, along with a Special Forces (*Spetsnaz*) brigade. In Pechenga there is a motorized infantry brigade and a naval infantry brigade. The stated ambition is that these units be ready for action in only a few hours. An Arctic Brigade, recruited from *Spetsnaz* special forces accustomed to Arctic conditions, was also to be established in Pechenga, according to an announcement by the commander of Russia's ground forces in March 2011. Plans have since been postponed to 2015. It is too early to tell if the brigade will be an entirely new unit.

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² For a thorough military-political and technical analysis of this missile system see Forss, 2012.

The Alakurtti Air Base east of Salla is being repaired and a renovated helicopter regiment is likely to be stationed there. Its equipment includes attack helicopters and armed transport helicopters. From equipment stored in the area a new motorized infantry brigade can be established which the helicopter regiment may support. At least one more brigade may be established with the equipment stored in Petrozavodsk, the capability of which was demonstrated in a mobilisation and combat exercise in September 2012.

At Lekhtusi, to the north of St. Petersburg, an effective radar base has been completed in order to provide early warning of a possible strategic missile attack. In addition, a new air-surveillance radar base at Hogland (Suursaari) has been built. In addition to the Gulf of Finland, it covers the air space of Estonia and all of southern Finland.

In the 1st Air Force and Air Defence Command (1 Командование BBC u ΠBO) the air forces of the Baltic and Northern Fleets have a strength of more than two hundred combat aircraft of different types, plus more than a hundred combat helicopters, and an equal number of armed transport helicopters, plus many other specialized and transport planes. Certain other air force units also use this as a forward deployment area.

Russia's air forces everywhere can be quickly mobilized; its units are constantly in a state of readiness and at full wartime strength. They can be moved quickly to even distant locations.

New heavy S-400 air defence missiles, which earlier were operational only for the defence of Moscow, have been deployed in Kaliningrad. This, along with the Iskander missiles, is a powerful political signal. In a crisis situation, the S-400 would complicate aerial operations in the Baltic Sea airspace significantly, and perhaps even prevent such operations entirely.

A significant conclusion of the Royal Swedish Academy of War Sciences' *A National Strategy for Neighbouring Areas* research project is that NATO apparently would not be able to react quickly enough in case of a possible military conflict in the Baltic countries, but would be faced with a fait accompli.

The primary duty of the Finnish Defence Forces (FDF) is the defence of the homeland. The chosen Finnish defence concept of general conscription and regional defence implies that the peacetime readiness of the Finnish army is at a low level. This should be a reassuring element in the area, but it places great demands on any effort to increase the readiness.

The peacetime strength of the Finnish Defence Forces is among Europe's smallest, some 30,000 men and women. Especially in peacetime, the ground forces are in effect a training organization. Combat forces will be formed only from reserves.

Comparisons in which Finland's mobilized strength of 230,000 is matched against the professional peacetime armies of those countries with population figures many times higher, and a much smaller geographical area, and a totally different geopolitical stance are misleading, deficient, and slanted.

Finland's territory is large, and reserves are needed to protect a high number of vital industrial and societal infrastructure objects in all of Finland, and to replace gaps among those mobilized and battle losses suffered in the first combat operations. Annual training of age groups is necessary if the plan is to get a sufficient number of units. A large reserve is an indication of the will to defend the country, even after enemy invasion. Its preventive value is great.

INTRODUCTION

he division of Europe into two blocs actually began during the Second World War with the Allied race for Berlin, when a significant part of "liberated" Europe was left in the Soviet sphere of influence behind the Iron Curtain.³ In this huge political upheaval, the United States and the Soviet Union rose to be the undisputed leaders of the two political blocs, the East and the West. In the West, Soviet efforts to expand were dealt with using the so-called "Containment Policy" devised by President Truman⁵ and by founding the defensive North Atlantic Treaty Organization (NATO) in 1949. Gradually the Soviet Union realized that it was surrounded. The same attitude is still very much alive in Russia.

The next massive geopolitical change, the surprising break-up of the Soviet Union, came more than forty years later. According to Russia's President Putin, this was one of the great geopolitical catastrophes of the last century. Having recovered from the humiliating position experienced during Yeltsin's presidency, Russia is seeking to restore its great power status and considers it very important to alter the decisions of the 1990s, which it deems unfavourable to Russia. It is impossible to predict how well Russia will finally succeed, but it is certain that the effects of her aspirations, be they positive or negative, will extend to Finland and her neighbourhood.

During the decades of the Cold War, the military alliances in Europe were armed for a large-scale war with one another. Finland was especially affected by the powerful Soviet military power beyond her border, a significant part of which was always at a high state of readiness.⁸

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³ Churchill, 1946. The key passage of Winston Churchill's Fulton speech reads as follows: "From Stettin in the Baltic to Trieste in the Adriatic, an iron curtain has descended across the Continent. Behind that line lie all the capitals of the ancient states of Central and Eastern Europe. Warsaw, Berlin, Prague, Vienna, Budapest, Belgrade, Bucharest and Sofia, all these famous cities and the populations around them lie in what I must call the Soviet sphere, and all are subject in one form or another, not only to Soviet influence but to a very high and, in many cases, increasing measure of control from Moscow."

⁴ X (a.k.a. Kennan, George F.), 1947.

⁵ Truman, 1947.

⁶ President of Russia, 2005.

⁷ Juntunen, 2013. Professor Alpo Juntunen paints a thorough picture of Russian political culture and mode of thought, which is based upon geopolitics and historical tradition.

⁸ Gustafsson, 2007. Former Supreme Commander of Sweden's defence forces, General Bengt Gustafsson, has written extensively about the Soviet Union's operational plans aimed at Sweden (and Finland).

A departure from earlier times was the arrival of new weapons with hitherto unheard-of destructive power, including nuclear weapons. They totally upset the conception of a large-scale war, and they were perhaps the single most important factor in restraining the great powers from taking too great risks. In spite of several serious crises, peace was preserved between the great powers and their allies.⁹

The build-up of nuclear arsenals of the two superpowers, the United States and the Soviet Union, reached exceptional proportions. The striving for nuclear parity and the eventual goal to surpass the United States, with complete disregard both for efforts and costs, undoubtedly weighed more in Soviet decision-making than other factors.

However, the country's political and military leaders had already concluded during the 1970s that there would be no victor in a nuclear war.¹⁰ This matter was finally confirmed by both President Reagan and Gorbachev in 1985. "A nuclear war cannot be won and must never be fought." In addition, according to the Soviet leadership, a nuclear war must be avoided at all cost.¹¹

It is difficult to interpret correctly the military-operational plans discovered in the archives of the former German Democratic Republic (East Germany or GDR) in which the abundant use of tactical nuclear weapons would have had an obvious and decisive role. As early as the time of the Cuban missile crisis in October of 1962, the Soviet military leadership issued a stern order that is was categorically forbidden to use the short- and medium-range nuclear weapons stationed in Cuba to repel a possible landing by the United States.¹²

¹¹ Ibid. See the interviews with the Chief of the Soviet General Staff, Marshal Sergey F. Akhromeev and Colonel General (ret.) Andrian A. Danilevich. This was not well understood in the West until the early 1990s, when key Soviet figures told about it openly. The Soviet top military leadership also assured that the Soviet Union never had the intention to use nuclear weapons first. See [http://www.gwu.edu/~nsarchiv/nukevault/ebb285/vol%20II%20Akhromeev.pdf] and

[http://www.gwu.edu/~nsarchiv/nukevault/ebb2 85/vol%20iI%20Danilevich.pdf].

⁹ No country with nuclear weapons has waged all-out war against another country equipped with nuclear weapons. India and Pakistan have fought over the possession of the Kashmir area, but only with conventional means. See also Shultz, Perry, Kissinger & Nunn, 2011.

¹⁰ Hines, 1995.

¹² Fursenko & Naftali, 1997, pp. 242–243. In order to manage the risks, Soviet Defence Minister Marshal Rodion Malinovsky gave the order, after long deliberations, that a possible U.S. landing was to be repelled entirely with conventional means. The ballistic missiles of General Statsenko, Commander of the missile division, and the "cargo" [i.e. nuclear warheads] of Colonel Beloborodov were thoroughly ruled out from the allowed military means. In addition, tactical nuclear weapons such as Luna (Frog 7) rockets or FKR-cruise missiles were ruled out [http://www.gwu.edu/~nsarchiv/nsa/cuba_mis_cri/621022%20 Malinovsky's%20Order%20to%20Pliyev.pdf]. See also McNamara, 2002.

In the West, the Soviet Union's aggressive offensive posture has perhaps been overemphasized while at the same time its fear of a Western surprise attack has been underestimated.¹³ For his part, General Matvei Burlakov, the last commander of the Soviet Western Army Group, spoke in March 2005, of the exceptionally high level of readiness of his troops in the former East Germany. His troops numbered over half a million men, and there were abundant nuclear weapons at their disposal, which could have been used in a first strike if necessary.¹⁴

Nuclear deterrence did not, however, prevent the Soviet Union from interfering in the people's uprisings among its Eastern European allies in the 1950s and 1960s, but it had a major significance in the preservation of peace in Europe. Finland was in a difficult position, but also benefited from that.

¹³ Burr & Savranskaya, 2009.

¹⁴ Kalashnikova, 2005. The interview given by General Burlakov reveals that nuclear first use was indeed planned, regardless of what the political leadership officially stated."[Foreign Minister Gromyko] said one thing and the military thought another. We are the ones who are responsible for [fighting] wars."

4 · The Development of Russian Military Policy and Finland

GEOPOLITICAL CHANGES IN EUROPE AFTER THE END OF THE COLD WAR

the Cold War is generally considered to have ended with the collapse of the Berlin wall, or at the latest with the breakup of the Soviet Union in December of 1991. ¹⁵ Geopolitical changes in the CSCE Member States were noteworthy. Germany was reunited, and the Soviet republics became independent. In the case of the Baltic States it was indeed a return to independence. The Government of Finland unilaterally declared in September of 1990 that the provisions of the Paris Peace Treaty of 1947 limiting Finland's sovereignty had lost their meaning. At the same time President Koivisto reinterpreted the Treaty on Friendship, Co-operation and Mutual Assistance [FCMA], which finally disappeared into history on the fall of the Soviet Union in December the following year. ¹⁶ Finland joined the European Union in 1995, and her security political position became perhaps more favourable than ever before after 1917, when independence was declared.

The President of Czechoslovakia Vaclav Havel chaired the Warsaw Pact summit meeting on 1 July 1991, when that military alliance was formally terminated.¹⁷ NATO, however, prevailed, and was assigned new tasks.

Lavrov, 2011. The exact timing of the end of the Cold War is diffuse. It is rather a process that is still affected by the relations between the leading powers, because these have returned to it repeatedly. Speaking at the 47th Munich Security Conference on 5 February 2011, Russia's Foreign Minister Sergey Lavrov referred to President Dmitry Medvedev's initiative to conclude the Euro-Atlantic Security Treaty (EST) as follows: "[...] Essentially we are talking here about permanent elimination of the Cold War legacy". The United States and Russia made a joint statement at the 2010 NPT Review Conference which said that signing of the New START Treaty "in effect, marks the final end of the "Cold War" period". See also United Nations, 2010. Colonel Sergey Tretyakov, a former officer in charge of Russia's foreign security service SVR operations in the United States in 1995–2000, strongly denied that the Cold War was over as late as in June 2009. See also Fox News, 2009, "KGB Defector Weighs in on US/Russian Relations", 7 June 2009 [http://www.youtube.com/watch?v=zh7VG3jCHQA] and Earley, 2007, pp. 330–331.

¹⁶ Nyberg, 2007, pp. 285–299.

¹⁷ Havel, 2008, p. 294. President Havel was of the opinion that the termination of the Warsaw Pact was the single most significant event during his term as President. Because of his personal experiences he found the official termination ceremony to be both strange and absurd. Completing the Soviet withdrawal was a very complicated process and the last Soviet troops left the country only two years later.

The Conference on Security and Co-operation in Europe (CSCE), later known as the Organization of Security and Co-operation in Europe (OSCE), was instrumental in shaping Europe's new, so-called cooperative security regime (The Charter of Paris for a New Europe) in 1990.¹⁸ A crucially important update (The Istanbul Document 1999) was agreed upon in Istanbul, and it is still in force.¹⁹

2.1 Western Threat Views and the Development of Western Forces

After the break-up of the Soviet Union, Soviet forces withdrew some 1 000 kilometres to the east from Central Europe. The Soviet threat was gone and various "new threats" were added to the western threat scenarios with everincreasing weight. The 9/11 terrorist strike in New York in 2001 became a certain turning point.



Figure 1. With the break-up of the Soviet Union, Soviet troops withdrew some 1 000 kilometres to the east.

¹⁸ CSCE, 1990.

¹⁹ OSCE, 1999.

Western armed forces have been reduced radically and most countries have abandoned compulsory conscription. 20 For that reason, significant reserves are not being built up. Military activities are concentrated on crisis management (CM) and repelling threats far away. In Western Europe, countries have almost entirely lost their capability of territorial defence. A respected Russian observer estimated in January of 2011: "In reality, Europe is becoming a defenceless continent. [...] Without America the Europeans will be left naked and defenceless, because except for Britain, they have no armed forces to speak of."21 Increasingly expensive modern weapons put a strain on arms expenditures of Western countries, and therefore the purchases have been modest even at the expense of capability.

The fairly modest operation in Libya in the spring and summer of 2011 clearly revealed the military shortcomings of the European members of NATO.²² The out-going U.S. Secretary of Defence Robert M. Gates said at the NATO Headquarters on June 10, 2011 that

The blunt reality is that there will be dwindling appetite and patience in the U.S. Congress ... to expend increasingly precious funds on behalf of nations that are apparently unwilling to devote the necessary resources or make the necessary changes in order to be serious and capable partners in their own defence.²³

At the same time Mr. Gates also acknowledged the contributions of Norway and Denmark, whose performance in Libya was exceptionally good in relation to their resources.

NATO's total peacetime strength, the United States included, exceeded 5.3 million men in 1989. The corresponding figure of the Soviet Union was over 4.2 million and the strength of other Warsaw Pact forces was more than 1.1 million. Both military alliances were approximately equal in manpower.²⁴ Russia's recent peacetime strength is about one million. Here the manpower of the other Russian "power" ministries, about 500 000, has been omitted. NATO's corresponding strength is still surprisingly high, over 3.9 million men, of which the share of the USA and Turkey is more than a half.²⁵ There were grounds for such comparisons during the Cold War. Today they are no longer relevant. NATO no longer has any unified territorial defence and nei-

²⁴ IISS, 1989.

²⁰ The latest examples of countries that have abandoned general conscription are Sweden, who left it resting in peacetime, and Germany whose last contingent entered service in early 2011.

²¹ Karaganov & Shestakov, 2011.

²² Gates, 2011; Shankar, 2011; DeYoung & Jaffe, 2011.

²³ Ibid.

²⁵ IISS, 2011.

ther the troops trained for this task. Four distinguished researchers at RAND Corporation gave the following assessment of NATO's capabilities:

Power projection and the maintenance of significant forces outside of Europe's immediate neighbourhood will be particularly difficult due to reduced force size; limited lift and logistics capability; and a lack of certain key enablers (such as missile defence and unmanned aerial vehicles). Additionally, several key NATO European nations are either eliminating or significantly reducing key capabilities such as littoral maritime forces and the related intelligence, surveillance and reconnaissance platforms.

[...]

Put simply, the unit of account for European ground forces is set to become battalion battlegroups and brigade combat teams rather than full-strength divisions and corps. The navies of the major European naval powers will see radical reductions as well. For example, if Brazil's naval expansion plans are executed by the mid-2020s, the Brazilian navy will have carrier, destroyer and amphibious fleets comparable to the British and French navies combined.²⁶

The manpower of new NATO member states is modest. The rebuilding of the armed forces of the former Warsaw Pact countries is still in process. Their armed forces were to be used operationally only in specific auxiliary tasks ordered by the Soviet Union.

2.2 The Change of Attitudes in Russian Foreign Policy

The warm relations between Russia and the western countries at the start of the period following the Cold War unfortunately did not last long. Russia's liberal Minister of Foreign Affairs Andrei Kozyrev, who was well disposed toward the West, surprised his audience at the CSCE foreign ministers' meeting in Stockholm on December 14, 1992. He noted that:

The space of the former Soviet Union cannot be regarded as a zone of full application of CSCE norms. In essence, this is a post-imperial space, in which Russia has to defend its interests using all available means, including military and economic ones. We shall strongly insist that the former USSR Republics join the new Federation or Confederation without delay, and there will be tough talks on this matter.²⁷

Kozyrev admitted later that the speech was intended to be a joke. Its objective had been to serve as an alarm clock. Twenty years later Russia is in the process of consolidating her grip over major portions of the post-Soviet space in the name of the Collective Security Treaty Organisation (CSTO), and hardline circles in Moscow are optimistic as, in their opinion, "The White House

²⁶ Gordon, Johnson, Larrabee & Wilson, 2012, p. 140.

²⁷ Rotfeld, 2009, p. 30; Whitney, 1992.

has sent a clear signal to Moscow [at the beginning of the second term of the Obama Administration] that the post-Soviet space is not included in the main priorities of U.S. foreign policy". 28 This would give Russia freedom of action. The intergovernmental military alliance CSTO was agreed upon on 15 May 1992 and the Charter of CSTO entered into force on 18 September 2003.²⁹

At the CSCE summit meeting held in Budapest in December 1994, a clear change in direction could be noted. "Europe may be forced into a Cold Peace", President Boris Yeltsin, warned.³⁰ After this, Russia's liberal political leadership was gradually forced to step aside. In January of 1996, Yevgeni Primakov, a high-ranking officer in the former KGB and the head of the foreign intelligence service SVR, replaced Mr. Kozyrev. Political power in Russia and the responsibility for threat assessments and situational awareness shifted increasingly into the hands of conservatives who were close to the country's security agencies and military authorities.

The development sketched out in Andrei Kozyrev's "joking speech" of 1992 was conclusively realized after the war in Georgia, when President Medvedev

²⁸ Руська Правда, 19 January 2013, США и Россия разграничат «сферы влияния» (Александров, Михаил (Aleksandrov, Mikhail)) [http://ruska-pravda.org/monitoringsmi/38-st-monitoring-smi/19724--l-r.html]. Dr. Mikhail Alexandrov, Department head at the CIS Baltic Institute, writes in Ruska Pravda: "Washington actually offers Moscow exchange: to agree to the consolidation of the post-Soviet Russia's sphere of influence in return for non-interference in other regions of the world, which are vitally important to U.S. interests." See also RIA Novosti, 30 January 2013, "Russia, Kazakhstan Sign Air Defence Agreement"

[[]http://en.rian.ru/world/20130130/179120146/Russia-Kazakhstan-Sign-Air-Defen-se-Agreement.html]; RIA Novosti, 31.01.2013, "Russia, Armenia Agree to Set up Joint Defence [http://en.rian.ru/military_news/20130131/17913 8896/Russia-Armenia-Enterprises" Agree-to-Set-up-Joint-Defense-Enterprises.html]. In late January 2013 Russia and Kazakhstan signed an agreement to create a joint regional air defence system and Russia and Armenia agreed on defence co-operation, including building joint defence enterprises and maintenance centres for military equipment.

²⁹ Организация Договора о Коллективной Безопасности (ОДКБ) – Collective Security Treaty Organization (CSTO), Basic facts [http://www.odkb.gov.ru/start/index_ aengl.htm, accessed 29 January 2013]. The Secretary-General of CSTO, Col.Gen. Nikolay Bordyuzha was appointed in 2003. His background includes service in the Strategic Rocket Forces, the KGB, the Federal Border Service, and the Presidential Administration. See more VTPERSON.RU, 2013, "Бордюжа, Николай Николаевич" [http://viperson.ru/wind.php?ID=1487, accessed 29 January 2013].

³⁰ The disappointing Budapest CSCE summit was a disaster, according to Newsweek Magazine. Russia opposed NATO enlargement and especially the proposals for statements concerning Serbia and the war in Bosnia. Newsweek: "a red-faced Yeltsin admonishing a stunned Bill Clinton that 'the destinies . . . of the world community [cannot] be managed from a single capital [i.e., Washington]." See Newsweek, 19 December 1994, "Plunging into [http://www.newsweek.com/1994/12/18/plunging-into-a-coldpeace.html]. After this "Cold Peace" as a concept has remained doggedly in the vocabulary of international politics. See Beste, Klussmann & Steingart, 2008.

presented the main principles of Russian foreign and defence policy in August of 2008. Special attention was given to the following passage:

Protecting the lives and dignity of our citizens, wherever they may be, is an unquestionable priority for our country. Our foreign policy decisions will be based on this need. We will also protect the interests of our business community abroad. It should be clear to all that we will respond to any aggressive acts committed against us.³¹

These principles were finally written into law at the end of 2009, giving Russia's armed forces the right to operate abroad.³²

With regard to Russia's relations to foreign countries, Medvedev affirmed that "there are regions in which Russia has privileged interests. These regions are situated in countries with which we share special historical relations and are bound together as friends and good neighbors."33 In September of 2008, Medvedev told political analysts from the Western countries that: "Our neighbors are close to us in many respects, and are a traditional area of interest for the Russian nation. We are so close to each other, it would be impossible to tear us apart, to say that Russia has to embark on one path and our neighbors on another."34

Thus Russia also strives to strengthen the loyalty of Russians living outside her borders to their Motherland, and may also use harsh methods to achieve her goals. In this sense, problems have come up, especially in certain Baltic States in that preserving Russian citizenship is more important to a large number of Baltic Russians than the citizenship to their actual homeland. One may consider secondary citizenship to also include certain obligations to the country one is a citizen of. Problems of conflicting loyalties may arise from this in times of crisis and not only in the Baltic States.

Finland is also a target of Russia's persistent efforts to increase her influence using "soft power". Under the pretext of protecting the rights of Russians living in Finland, Russian authorities have meddled in the affairs of private citizens and tried to elevate these issues to a national level. In a particular case concerning child-care, Foreign Minister Sergei Lavrov went as far as to condemn Finland of "uncivilized" treatment of a Russian national.³⁵

³¹ President of Russia, 2008.

³² Matthews & Nemtsova, 2009; People's Daily Online, 9 November 2009, "Medvedev Signs Use of Russian Army Abroad into Law"

[[]http://english.people.com.cn/90001/90777/90851/6808120.html].

³³ President of Russia, 2008.

³⁴ Debski, 2008.

³⁵ Voice of Russia, 8 October 2012, "Russian Foreign Chief Slams Finland for Separating Mother and New-Born Baby" [http://english.ruvr.ru/2012_10_08/Russian-foreign-chief-

2.3 The Return of Russia's Geopolitical Way of Thinking

In the confusing times following the collapse of the Soviet Union, there arose in anti-Western circles an immediate desire to find a new direction and a new basis for values. From a group of conservative Russian geopolitical thinkers, there soon emerged a forward-looking young philosopher named Alexander Dugin (b. 1962), who's influence on ruling circles has been noteworthy. According to Dugin, who grew up in a military family, true patriotism is to be found only in the army and in the security services.³⁶

In 1992 Dugin had already been appointed teacher in the General Staff Academy of the Russian armed forces. There, under Lieutenant General Nikolai Klokotov, the director of the Academy's Strategic Institute, and with the support of the Principal of the Academy and future Minister of Defence Army General Igor Rodionov, he started to work on an important book about the foundations of geopolitics and Russia's geopolitical future.

In 2003, Dr. Alpo Juntunen, former Professor of Russia's security policy at the Finnish National Defence University, encapsulated Dugin's ideas as follows:

[Dugin examines] everything as a battle between land and sea, in which the sides are the maritime powers led by the U.S.A., and Eurasia, led by Russia. The forces led by the United States are the enemy, which strives for a liberal-commercial, cultureless, and secularized world mastery. This grouping is now overwhelming, but in order to save the world, the Eurasian continent will have to counterattack under the leadership of Russia. A new great power alliance must be shaped, to be led by the Moscow-Berlin axis."

[...]

Military co-operation with Germany must be made closer. The worst military problems facing the future superpower are the border areas, the rimland, which the Atlantic powers are striving to get under their control in order to weaken the Moscowled mainland. Moscow has to take a firmer grip of the rimland area. [...] Russia's only proper form of government is imperial.³⁸

slams-Finland-for-separating-mother-and-new-born-baby/]. A prominent role on the Russian side is played by Dr. Pavel A. Astakhov, Children's Rights Commissar for the President of the Russian Federation. He graduated from the Faculty of Law, Dzerzhinski KGB Higher School in 1991 [http://english.rfdeti.ru/content.php?id=12].

³⁶ Laruelle, 2006. See also Dugin, 2010.

³⁷ Other important axes to thwart the power of the United States and China are according to Dugin the Moscow-Tokyo and Moscow-Tehran axes. See Dunlop, 2004.

³⁸ Juntunen, 2003, pp. 39–40.

Giving up the process of empire-building is, in Dugin's world of values, the same as "national suicide." Without an empire, Russia "will disappear as a nation".³⁹

Indications of the impact of Dugin's thinking came as early as October 1995 when INOBIS (Институт оборонных исследований, ИНОБИС), a semi-official defence research institute close to Russia's power ministries, published an outspoken report which outlined the external threats to Russia's national security and possible countermeasures.⁴⁰

"The chief aim of the US and Western policy toward Russia is not to allow her to become an economically, politically, and militarily influential force and to turn the post-Soviet space into an economic and political appendage to the West, as well as its mineral-rich colony. That is why the United States and its allies are the sources of the major external threats to this country's national security and should be regarded as the main potential adversaries of the Russian Federation, political, and military affairs," states the INOBIS report dated October 26, 1995.

In Dugin's vision, Germany and Russia would again divide Europe into spheres of influence. Germany would get Europe's Protestant and Catholic areas, but not Finland. Nevertheless, Europe's division into spheres of influence with Germany would not be Russia's final goal, but rather the "finlandisation of all of Europe". According to Dugin, Finland belongs to the

Karelian-Finnish geopolitical zone, which is culturally and in part economically unified, but forms a strategic support for a Eurasian center [i.e. Moscow] [...] As a state, Finland is very unstable, since it belongs naturally and historically to Russia's geopolitical sphere.⁴¹

Russia's Minister of Culture, Vladimir Medinsky echoed these same sentiments at the 6th Finno-Ugric Peoples World Congress in Siófok, Hungary on 5 September 2012.⁴²

³⁹ Dugin, 1997, p. 197 and 251. See also Finnish Institute of International Affairs (FIIA), 2011. The well-known U.S. Russia expert, Professor Stephen J. Blank expressed essentially the same interpretation as Dugin in Helsinki in November 2011: "The logic of European integration represents in itself a threat to Russia's empire mindset. Also the values the EU represents are seen as threatening in Russia."

⁴⁰ The Institute of Defence Studies (INOBIS), 1995. The supporters of the INOBIS institute included among others the General Staff, military industrial enterprises and the Ministry of Atomic Energy. See also Staar, 1996. Colonel (ret.), Dr. Richard Staar was the Head of the U.S. Delegation to the negotiations on Mutual and Balanced Force Reductions (MBFR) in Vienna 1981–1983.

⁴¹ Dugin, 1997, p. 316. See also Koivisto, 2001, p. 292.

⁴² Mallinen, 2012. In the presence of Finnish President Sauli Niinistö and Estonian President Tomas Hendrik Ilves, Russia's Minister of Culture Vladimir Medinsky said that the

Dugin's suggested means for achieving Russia's sovereignty over Eurasia were not primarily military, but he favoured a more subtle program which also included subversive activities in the target countries and undermining their stability through the use of disinformation. In addition, Russia's gas, oil, and other natural products were to be used as a harsh means of pressuring and bending other countries to the will of Russia. The same was already proposed in the INOBIS report. According to Dugin, one should not even fear resorting to war, but it would be better if one could achieve the goals without the use of force:

It is vitally important for Russia to prevent Western oil companies from illegally developing resources off the Caspian Sea shelf...Russia must...take practical steps and even use force if necessary to prevent any activity related to oil production by foreign companies in the former Soviet space. 43

Later developments, such as the war in Georgia and the continued pressure on that country, 44 clearly show that Dugin's basic ideas are significant and eniov far-reaching support.45

Russia has also succeeded in keeping central Asian states which are rich in hydrocarbons quite well in her grasp and has gained agreements advantageous to her from Azerbaijan, Turkmenistan, and Kazakhstan. 46 Prime Minister Putin's initiative in October 2011 to establish a Eurasian Union fits Dugin's vision well.⁴⁷ Russia's preferred solution to the European missile defence problem –

Finno-Ugric world is an inseparable part of the Russian world and that Russia will not repeat the multicultural mistakes that have been done in Europe. He went on to remind the Finns that Finland as a nation had survived only as a result of Russia's goodwill, and ended his speech by quoting Czar Alexander I, who speaking to a French visitor referred to a motley group of Finns, Tatars and Georgians as "all being my Russians". After this event Minister Medinsky went to Pskov to participate in the founding of the Izborsky Club for conservative patriots. See e.g. Samarina, 2012; Newsru.com, 8 September 2012, "Мединский все-таки приехал в "Изборский клуб" патриотов и выступил с заявлением" [http://www.newsru.com/arch/russia/08sep2012/medinsky.html].

43 Dunlop, 2004; Международное Евразийское Движение (Mezhdunarodnoe Evraziiskoe dvizhenie), 5 February 2009, "Dugin: Russia should consider war to head off the Nabucco project, 'Today's Zaman"

[http://evrazia.info/modules.php?name=News& file=article&sid=4190].

⁴⁴ Antidze, 2011. The following source is a good example of how Dugin's teachings are put to practice: Umland, 2008.

⁴⁵ Dugin became a mystic later. See Laruelle, 2006.

⁴⁶ See Juntunen, 2013, p. 81. Professor Alpo Juntunen points out that the main problem of the Central Asian states is their dependence on Russia's energy industry and the transport routes that it controls. See also Juntunen, 2003.

⁴⁷ Izvestia, 4 October 2011, "A New Integration Project for Eurasia: The Future in the Making (Putin, Vladimir) [http://www.rusemb.org.uk/press/246]. According to Prime Minister Putin: "A crucial integration project, the Common Economic Space of Russia, Belarus and Kazakhstan

dividing the area to be defended and responsibility for defence into separate sectors – reflects Dugin's geopolitical thinking.



Figure 2. Russia's geopolitical ambitions are revealed in this slide describing Russia's 'Sectoral Approach' to NATO-Russian Joint System of Missile Defence Combat Control in Europe. Deployment of NATO BMD assets in the shaded area covering Finland and parts of Sweden and Norway would according to this view challenge the capabilities of Russia's Strategic Nuclear Forces. Chief of General Staff, Army General Nikolai Makarov presented this picture in a speech in Helsinki on 5 June 2012.

The construction of the Nord Stream gas pipeline in the Baltic Sea partially serves the same goal. Poland and the Baltic States have strongly opposed the construction of the pipe for reasons of economics and political security.⁴⁸

(CES), will kick off on January 1, 2012. This project is, without exaggeration, a historic milestone for all three countries and for the broader post-Soviet space." See also Marin, 2011 and FIIA, 2011. Stephen J Blank's summary in Helsinki, 8 November 2011: "The Eurasian Union is a reflection of Russia's empire mindset and there is nothing dramatically new in it. It is an integration project based on the primacy of Russia and Russia's interests at the expense of the sovereignty of the smaller post-Soviet states in the region." See also STRATFOR, 2011, "Russia, Belarus: Setting the Stage for the Eurasian Union", 25 November 2011. According to STRATFOR: "Russia used Belarus' financial hardship as an opportunity to assert itself, raising export duties on key goods in order to pressure Minsk at a time of weakness. Belarus eventually sold many of its strategic assets to Russia in order to get what Minsk wanted the whole time — economic and financial concessions, primarily in the form of lower natural gas prices. [...] Lukashenko has voiced his support for Putin's Eurasian Union, calling for the union's formation to be moved up to 2013 (though Russia has preferred to stick to the original 2015 target date)."

⁴⁸ Peltomäki, 2011. "The Poles believed that the purpose of Nord Stream is to make it easier for Russia to use the threat of a cut-off of natural energy supplies as leverage against Poland and other East European countries. In principle, Nord Stream makes it possible for Russia to cut off supplies to East Europe, as it

One can also view the warm period of relationship between Russia and Germany during the last decade in the light of history. U.S. history professor emeritus and former diplomat Albert Weeks emphasizes: "In the present post-communist era in Russia, Moscow's ties with Germany can be described as stronger than those with any other state." The co-operation between these countries is extending strongly also into the military sphere, 50 which has caused uneasiness especially among the new NATO member states. Germany is known to have opposed NATO contingency planning for the defence of

the Baltic States.⁵¹ Germany's strivings for great power status, however, does not find popular political support and Germany is not ready to assume security political leadership in Europe.⁵² That German position suits Russia per-

fectly.

For a long time, the NATO enlargement has been a sore spot for Russia. The writers of the INOBIS report already considered the enlargement of NATO and especially the possibility of Baltic NATO membership so dangerous that Russia should have prepared to occupy those countries. Russia did not, however, resort to such extreme measures, but the so-called Bronze warrior dispute and especially the war in Georgia in August of 2008 demonstrated that Russia was prepared to take stern measures when necessary. "If we had wavered in 2008, the geopolitical layout would have been different; a range of countries which the North Atlantic [Treaty Organization] tries to artificially 'protect' would have been within it", President Medvedev said in November 2011.⁵³

did during the "gas war" of 2009 with Ukraine. The undersea pipeline makes this possible without interrupting sales to the lucrative West European market."

⁴⁹ Weeks, 2011, p. 50. See also Lukyanov, 2012. Only in late 2012 there were signs of cooling relations between Germany and Russia.

⁵⁰ The military co-operation is versatile, ranging from bilateral military exercises to military high-tech. One of the latest examples is the agreement with Rheinmetall to build a military combat training simulator for the Russian ground forces. Tactical situations up to brigade level can be handled. *Rheinmetall Defence*, 2011, "Rheinmetall Wins Major Order in Russia", 24 November 2011; STRATFOR, 2011a, *Russia: German Company To Build Military Training Center*, 21 June 2011; Pyadushkin, 2011.

⁵¹ European voice, 21 January 2010, "Thanks to Poland, NATO Will Defend the Baltic States"; See also Daalder, 2011.

⁵² Baer, 2011. Germany's pronounced passiveness regarding the U.N. operation in Libya in March 2011 is a good example. German Foreign Minister Guido Westerwelle said that the world has changed and that Germany may form new partnerships. U.S. President Barack Obama no longer listed Germany an ally. Germany's former Foreign Minister Joschka Fischer regarded Germany's foreign policy a farce. Germany has, however, assumed a leading role in Europe in the efforts to curb the prolonged and difficult financial debt crisis. It will be interesting to see what results Germany's strong leadership ambition will produce in this respect.

⁵³ RIA Novosti, 21 November 2011, "Russia's 2008 War Prevented NATO Growth – Medvedev" [http://en.rian.ru/russia/20111121/168901195.html].

The Baltic States could be occupied without any risk, and "Russia has all legal and moral rights to invade the Baltics. ... Analysis shows that no one in the West is going to fight with Russia over [these countries]", the INOBIS analysts concluded. This assessment is probably still relevant, and it raises the question of the difficult problems of defending the Baltic countries.⁵⁴

The enlargement of the Atlantic Alliance since the early 1990s has been primarily a political process. Its military dimension has been secondary. In the background of Russia's stiff opposition is the knowledge that countries which have joined NATO may have slipped permanently from Russia's grip. For these reasons alone, "NATO expansion should be kept at bay with an iron fist." ⁵⁵

Russia's former Foreign Minister Andrei Kozyrev wrote in the *Newsweek* magazine (February 10, 1997) that "the Russian people must be told the truth, and the truth is, NATO is not our enemy." The contrast between the views of Kozyrev and those of the current Russian leadership is great. According to a *Wikileaks* report published in the Norwegian daily *Aftenposten* on December 17, 2009, Vladimir Putin allegedly told NATO Secretary-General Anders Fogh Rasmussen that NATO no longer has a purpose and it was in Russia's

⁵⁴ Dr. Henry Kissinger gave a lecture at the German Führungsakademie der Bundeswehr in Hamburg in the autumn of 1997. A Finnish naval officer, Commander Jyrki Berner asked Dr. Kissinger: "What would NATO and/or the west do if Russia using political, economical or military threats or force will retake the Baltic States?" Kissinger answered literally as follows: "The Commander comes from Finland and surely knows history. In 1956 world peace and the fate of ten million Hungarians hung in the scales. The Commander knows the answer. Next question!" Commander (ret.) Jyrki Berner, personal communication, 14 March 2011

⁵⁵ Karaganov, 2011; *RIA Novosti*, 26 February 2012, "Russia Should Pursue 'Iron Fist in a Kid Glove' Foreign Policy – Rogozin" [http://en.rian.ru/russia/20120226/17153926 2.html].

⁵⁶ Kozyrev, 1997; Ilves, 1997. See also Forss, 1997.

The sident of Russia, 2010. President Medvedev: "It is not about our military doctrine, but about the never-ending enlargement of NATO through absorbing the countries that used to be part of the Soviet Union or happen to be our closest neighbours, such as Romania and Bulgaria. This is the threat. NATO is a military alliance which has expanded itself right to our borders. Our Armed Forces should therefore be ready to accomplish their missions in light of the changes we have seen." See also RIA Novosti, 31 May 2008, "Russia Opposes NATO Expansion in Principle – PM Putin" [http://en.rian.ru/Russia/20080531/ 1089652 13.html]; Felgenhauer, 2010. The Secretary of Russia's National Security Council and former Head of the FSB Nikolai Patrushev said that the "consensus opinion of all who worked on the military doctrine [was] that NATO threatens us and seriously." The former Russian officer in the SVR, Colonel Sergei Tretyakov, stated that Russia's security threats since Soviet times have been the United States, NATO and China, in this order. See more Fox News, 7 June 2009, "KGB Defector Weighs in on US/Russian Relations" [http://www.youtube.com/watch?v=zh7VG3jCH QA]; See also Earley, 2007, pp. 330-331.

interest that NATO no longer exists.⁵⁸ The director of the Carnegie Moscow Institute, Dr. Dmitri Trenin, wrote in late November 2011 that "The Russians ... persist in seeing the United States through the old Soviet prism of a superpower confrontation." President Putin returned to this topic on 5 October 2012, when visiting the Russian 201st Military Base in Tajikistan:

I believe that NATO, which was formed during the Cold War, has long ago lost its primary function and it is unclear why it exists today. There is no more confrontation between two political systems since there are no two systems any longer and no Warsaw Pact, which one way or another was NATO's rival. So it is unclear why NATO exists to this day. I think it is largely a throwback to the Cold War. But the existence of this military bloc is a geopolitical reality which we must take into account.⁶⁰

At the Istanbul summit in 1999, the OSCE member states, including Russia, approved the *Charter for European Security* (in The Istanbul Document).⁶¹ The following quote is worth mentioning:

We affirm the inherent right of each and every participating State to be free to choose or change its security arrangements, including treaties of alliance as they evolve. [...] Within the OSCE no State, group of States, or organization can have pre-eminent responsibility for maintaining peace and stability in the OSCE area, or can consider any part of the OSCE area as its sphere of influence. 62

This principle was already written in the NATO-Russia Founding Act signed in Paris on May 27, 1997.⁶³ Russia compared this document to the Helsinki Final Act of 1975 and emphasized its binding nature.⁶⁴ In the Founding Act, NATO and Russia

[...] shared the commitment to respect the sovereignty, independence, and territorial integrity of all states, and their inherent right to choose the means to ensure their own security, the inviolability of borders, and the people's right of self-determination as enshrined in the Helsinki Final Act and in other OSCE documents.⁶⁵

Since then Russia's spheres of influence thinking has only become stronger. She has taken the initiative to replace the Paris Charter and the Istanbul

⁵⁸ Aftenposten, 11 February 2011, "Wikileaks Dokument, 6 January 2010, Additional Details on Syg's Moscow Trip Allege Putin Sparred on Missile Defence" [http://www.aftenposten.no/spesial/Wikileaksdokumenter/article4025434.ece].

⁵⁹ Trenin, 2011.

⁶⁰ President of Russia, 2012.

⁶¹ CSCE, 1990. See also OSCE, 1999, p. 3.

⁶² Ibid.

⁶³ NATO, 1997.

⁶⁴ Puheloinen, 1999, p. 90.

⁶⁵ NATO, 1997.

Document with a new "Helsinki Plus" agreement, which would better serve her geopolitical aspirations. ⁶⁶ In March 2011, the prestigious Russian Valdai Club, led by Professor Sergey Karaganov, published a report about the development of the relationship between Russia and the United States. The report proposes that, as a precondition for talks concerning non-strategic (tactical) nuclear weapons, the demands of the Istanbul Document and the so called flank rules of the CFE Treaty should be lifted. ⁶⁷

The summary of Europe's geopolitical development in the last few decades presented above demonstrates that the situation with regard to international security may not have changed as fundamentally as is generally believed. It also serves as a foundation for a more thorough assessment of Russia's military-political development.

⁶⁶ President of Russia, 2009. See also Forss, 2010, p. 59.

⁶⁷ Karaganov, 2011a, pp. 29–30.

AN ESTIMATE OF RUSSIA'S MILITARY-POLITICAL DEVELOPMENT

NOBIS published a report on Russia's military reform and security in 1996. The "strategy of neutralizing external threats and assuring the na-L tional survival of the Russian Federation" recommended by the writers of the INOBIS report contained forceful stands and concrete measures.

According to the report, the role of the armed forces is so central to Russia that she should not participate in one-sided arms reductions. This is especially relevant to nuclear weapons. "Russia's nuclear potential is one of the few arguments that can [still] convince the West." It is necessary to develop the strategic nuclear forces (SNF) with determination. Tactical nuclear weapons should become the backbone of Russia's defence capability in all three European theatres, i.e. in the Polish, Baltic Sea, and northern directions, and the southern Black Sea direction (Crimea, Abkhazia, Georgia, and Armenia). This would be even more important after Poland, Hungary, and the former Czechoslovakia became NATO members.⁶⁹ The deployment of tactical nuclear weapons in Kaliningrad and on some of the ships of the Baltic Fleet was considered crucial.⁷⁰

Dr. Alexander Pikayev, a well-known expert on nuclear weapons, wrote in the Moscow Carnegie Institute report as follows:

The issue of TNWs in Europe became more acute after the Baltic States joined NATO. The buffer dividing Russia from NATO vanished, the Kaliningrad Oblast was surrounded by NATO member states' territory, and the Baltic States are only a short distance from Moscow, and even closer to St Petersburg. The small depth of defence, very short flight time for missiles and attack aviation if deployed in Latvia and Estonia, and the sizable overall imbalance in NATO's favour in conventional weapons and armed forces have inevitably increased Russian interest in NSNW's [non-

⁶⁸ Dementyev & Surikov, 1996.

⁶⁹ Poland, Hungary and Czechoslovakia became NATO member states on March 12, 1999, i.e. more than three years after the publication of the INOBIS article.

⁷⁰ The recommendation of the INOBIS report was adopted in practice. There have been tactical nuclear weapons in Kaliningrad at least from the beginning of the 21st century. Swedish Foreign Minister Carl Bildt pointed out in August 2008: "There are nuclear weapons in Kaliningrad, which are integrated into Russia's Baltic Fleet. That has been the case for a period now, and we have also noticed that they perform exercises which include nuclear weapons" (Bildt, 2008). See also Forss, 2001; Forss, 2001a and Burt, 2012.

strategic nuclear weapons] as a means of neutralizing the West's numerical, geostrategic and operational superiority.

/**...**7

So far, NATO's eastward expansion has not been accompanied by the deployment of nuclear weapons and the most destabilizing nuclear weapons delivery systems on the soil of the new member states. Brussels has observed the provisions of the 1997 NATO-Russia Founding Act, which clearly states that NATO does not plan to deploy nuclear weapons on the territory of new member states. This document is not legally binding, but it continues to have important political significance as a factor contributing to security.⁷¹

Strategic parity in nuclear weapons with the United States still remains the cornerstone of Russian military doctrine. In tactical nuclear weapons, Russia has overwhelming superiority, even though their deployed numbers may be lower than earlier anticipated.⁷² The notion of nuclear first-use seems to have remained part of the doctrine, although it is not stated publicly.⁷³ Large exercises like West-1999 and West-2009 [Zapad-1999 and 2009] in the Baltic Sea area and Vostok-2010 [East-2010] in the Far East have ended with the simulated use of tactical nuclear weapons in situations where conventional forces alone were deemed insufficient.⁷⁴

In Russia, both her position and her military capability are assessed primarily in relation to the United States, NATO and China.⁷⁵ The USA, which has for long enjoyed military-technological superiority, is in a period of deep economic and fiscal problems. Expenditures, including those for defence, have to

⁷¹ Pikayev, 2009, p. 123.

⁷² Sutyagin, 2012; NTI Global Security Newswire, 2 December.2010, "Leaked Cables Confirm NATO Tactical Nuke Locations" [http://gsn.nti.org/siteservices/print_friendly. php?ID=nw_20101202_2226] and Lewis, 2010.

Westerlund, 2010, pp. 18–23. See also Podvig, 2010. According to Dr. Podvig, the military doctrine annex dealing with nuclear weapons, "Basic Principles of State's Policy in the Area of Nuclear Deterrence through 2020", was declared secret. SIPRI researcher Ian Anthony presented a similar view at NATO's Nuclear Deterrence and Defence: A Nordic Perspective Seminar organized by the Finnish Peace Union in Helsinki on 28 April 2011. Daivis Petraitis, Bureau Chief at the Lithuanian Department of Defence strongly endorsed this view. See also Zagorski, 2011, pp. 22–27.

⁷⁴ Lindvall, Rydqvist, Westerlund & Winnerstig, 2011, pp. 21–28.

⁷⁵ The School of Russian and Asian Studies, *The Military Doctrine of the Russian Federation, Approved by Russian Federation Presidential Edict on 5 February 2010*

[[]http://www.sras.org/military_doctrine_russian_federation_2010]. See also Earley, 2007, p. 331. Former SVR Colonel Tretyakov pointed out especially that the threats to Russia – The United States, NATO and China – had remained unchanged. Tretyakov died suddenly in June 2010. A large Russian spy ring in the United States was uncovered at the end of June 2010.

be reduced markedly. 6 She strives increasingly to stay out of those conflicts which do not directly affect her most important national interests. The Libyan conflict in the spring of 2011 is a good example of this.

For its part, the Chinese economy has continued its strong growth, and the country is developing its military capability with clear objectives and increasing budgetary support.⁷⁷

After the Cold War, the focus of attention of the United States has gradually shifted almost entirely from Europe to Asia and the Middle East. This opens new possibilities for Russia in Europe. 78 Russia strives to deal with the European states and also to pursue projects on a bilateral basis, which undermines the cohesion of both NATO and the European Union.⁷⁹ After making certain concessions regarding Afghanistan, Russia may strive to get assurances from NATO to show restraint, for example in its Baltic policy.⁸⁰ This kind of development would be worrisome at least to those small countries which have sought security from NATO and the U.S. against possible pressure from Russia. The so-called Visegrad countries, the Czech Republic, Hungary, Poland, and Slovakia have in this respect arrived at their own conclusion. On May12, 2011, they decided to establish a combat unit (brigade) with Poland as the lead country.81 This measure may be viewed as these countries' distrust in the ability and willingness of NATO and the US to provide sufficient security.

3.1 Military Threats and Military Doctrine⁸²

In a report published by Russia's Academy of Military Sciences, its president, Army General Makhmut A. Gareev, writes that Russia in the coming years will have to prepare itself for powerful geopolitical challenges and even threats rising from two directions, especially from the U.S. but also from China.⁸³

⁷⁶ Substantial defence expenditure savings will materialize when the US withdrawal from Iraq and Afghanistan are concluded, but traditional Pentagon activities, such as procurement programs will be subject to major cuts. See IISS The Military Balance 2012.

⁷⁸ Clinton, 2011. See also Fluornoy, 2011.

⁷⁹ Daalder, 2011.

⁸⁰ Ibid. See also Felgenhauer, 2010a.

⁸¹ STRATFOR, 12 May 2011, A Militarized Visegrad Group? and STRATFOR, 13 May 2011, A Tectonic Shift in Central Europe.

⁸² Russia's Chief of the General Staff, Army General Nikolai Makarov, described current military matters and thinking before the Public Chamber in Moscow on 17 November 2011. See Tikhonov et al. 2011.

⁸³ Bridge, 2011. Gareev compares a potentially threatening situation with the "Troubled times" (В смутное время) of 1598–1613, when Russia had to face both famine and foreign invasion forces. See also Karaganov (ed.), 2011a, p. 31: "Last but not least, Russia needs tactical nuclear weapons to avert the rise of fears over the «Chinese threat» in the future."

Russia may end up encircled in East-West pincers, and the task for planners is to find a solution for the problem in view.

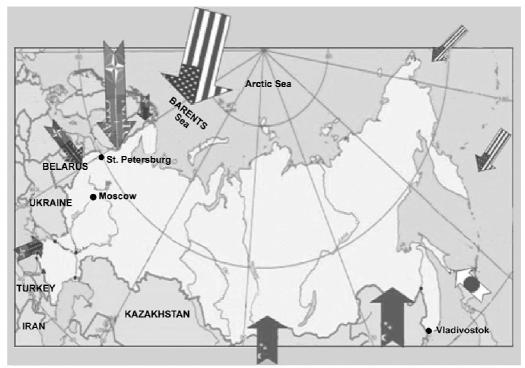


Figure 3. The traditional threat picture of the encircled Russia.

Although NATO considers Russia a partner, Russia, according to her new military doctrine that came into force in February of 2010, still considers NATO one of the main dangers, if no longer officially a threat.⁸⁴ The enlargement of NATO and the possible arrival of U.S. troops in areas near Russia are also viewed as threats.⁸⁵ Territorial claims to Russia, the use of military force in the vicinity of Russia, and international terrorism are presented as other threats.

Russia is especially sensitive about the plans to deploy elements of the US missile defence system in areas of the former Warsaw Pact countries, in spite of US/NATO assurances that the missile defence is not aimed at Russia and assessments of leading Russian missile experts stating clearly that Russia's nu-

⁸⁴ President of Russia, 2010. President Medvedev: "It is not about our military doctrine, but about the never-ending enlargement of NATO through absorbing the countries that used to be part of the Soviet Union or happen to be our closest neighbours, such as Romania and Bulgaria. This is the threat. NATO is a military alliance which has expanded itself right to our borders. Our Armed Forces should therefore be ready to accomplish their missions in light of the changes we have seen." See also Felgenhauer, 2010. Nikolai Patrushev, Secretary of the National Security Council and former Head of the FSB: "It is a consensus opinion of all who worked on the military doctrine that NATO threatens us and seriously."

⁸⁵ Deryabin, 2009 and Russia Today, 5 February 2010, "Russia's New Military Doctrine Approved" [http://rt.com/usa/news/ russia-military-doctrine-approved/].

clear deterrent is not endangered.86 Russia's primary response to U.S. initiatives regarding co-operation on missile defence has been a proposal to divide the areas to be defended into sectors, for the defence of which one of the partners would be responsible. NATO has opposed this idea steadfastly, as well as Russia's demand for a single missile defence agency to be formed together.87

Despite NATO's official optimism, possibilities of the US and Russia coming to an understanding about the missile defence plan, does not look promising. The politically infected issue has wound up in a difficult political deadlock, with Russia threatening to resort to strong asymmetric countermeasures against bordering states in Europe.⁸⁸

Given the disparate level of missile defence technology and capabilities in the United States and Russia, and considering military operational factors, it would be most difficult to create an integrated and interoperable missile defence system that would satisfy both parties.⁸⁹

In Russia's military doctrine, precision weapons and space-based systems play an essential role. Their strategic significance is considered so important that they should be regarded as being strategic weapons.

In doctrines, cyber warfare capability plays an increasingly important role in our present online interactive world. At the same time it has become a lasting

⁸⁶ The famous Russian missile designer Yuri Solomonov, (Chief designer of Topol-M, RS-24 Yars and Bulava) thinks that "all that fuss" surrounding the U.S. missile shield in Europe "is totally senseless". [...] It is a political game and it is not very smart. [...] The issue has nothing to do with real combat efficiency of the national strategic nuclear forces"; NTI Global Security Newswire, 18 March 2011, "Russian Nukes Not Undercut by U.S. Missile Defence, State Expert Says" [http://gsn.nti.org/gsn/nw_20110318_ 6126.php]. Former Chief of Staff of the Strategic Rocket Forces, General Viktor Esin, says that Russia's strategic weapons are able to defeat any missile defence systems that may be around during the next 20-30 years. Rysslands röst (Voice of Russia), 24 November 2011, Utveckling av ryska ballistiska robotar "(Development of Russian ballistic missiles)" [http://swedish.ruvr.ru/_print/60959244.html].

⁸⁷ RLA Novosti, 03 May 2011, "Moscow Pushes for Guarantee U.S. Missile Shield not Targeting Russia" [http://en.rian.ru/mlitary_news/20110503/163840949.html]; RLA Novosti, 29 April 2011, "Russia Outlines Its Vision of European Missile Shield" [http://en.beta.rian.ru/mlitary_news/20110429/163762332.html].

⁸⁸ RLA Novosti, 23 November 2011, "Russia to Move Missiles to EU Borders if U.S. Shield Talks Fail - Medvedev" [http://en.rian.ru/world/20111123/168974746.html]; See also NTI Global Security Newswire, 30 November 2011, "Russia Could Cancel Summit With NATO Due to Antimissile Impasse" [http://gsn.nti.org/gsn/nw_20111130_8656. php]; See also Frolov, 2011 and Trenin, 2011.

⁸⁹ RIA Novosti, 12 May 2011, "Rasmussen Calls for NATO, Russia to Build Security Together" [http://en.rian.ru/world/20110512/163985309.html]; Blank, 2010; NTI Global Security Newswire, 20 January 2011, "NATO Chief Sees Two Separate Systems in European Missile Shield" [http://gsn.nti.org/gsn/nw_20110120_9913.php].

threat. Cyber operations are carried out daily all over the world. Paralyzing of societal infrastructure, electric power production, information, business, transportation and logistics networks, and, on the other hand, the repulsion of attacks on them are a part of modern warfare. Actual military strikes are to be carried out simultaneously with cyber-attacks or separately to ensure that the desired results in case the cyber-attacks and other paralyzing actions have failed.

Before turning to Russian military organizational changes it may be prudent to remind of the four stages of armed conflict defined in Russia's military doctrine adopted in 2010, i.e. armed conflict, local war, regional war and large-scale war.⁹⁰

3.2 Shift of the Centre of Gravity in the Western Direction

Russia's new territorial defence structure, the so called Operational-Strategic Commands (Объединённое стратегическое командование) and their respective command and control systems, came into force on December 1, 2010. These four new commands replaced the former six military districts. All other forces belonging to the so called power ministries would be subordinated to these commands, at least in times of crisis. The forces of the former Leningrad and Moscow military districts, the Northern and Baltic Fleets (with the exception of strategic missile-carrying submarines), and the 1st Air Force and Air Defence Command (1 Командование ВВС и ПВО) are subordinated to the Joint Western Command (Western Military District). Its head-quarters is located in St. Petersburg.⁹¹

The new command structure was already tested in the large-scale military exercises in 2009. The different services are still in charge of developing training and improving war materiel. The Naval headquarters moved from Moscow to St. Petersburg in October 2012.⁹²

⁹⁰ The School of Russian and Asian Studies, SRAS, 20 February 2010, *The Military Doctrine of the Russian Federation approved by Russian Federation Presidential Edict on 5 February, 2010* [http://www.sras.org/military_doctrine_russian_federation_2010].

⁹¹ *Pravo.ru*, 21 September 2010, "B России останется только 4 военных округа - Указ Президента" [http://www.pravo.ru/news/view/38561]. Указ №1144 "О военно-административном делении Российской Федерации" is found here; See also home-page of the Ministry of Defence of the Russian Federation (Министерстерство обороны Российской Федерации) [http://www.mil.ru/index.htm or http://eng.mil.ru/] *and* Giles, 2012, p. 12. A brief summary of the thinking behind introduction of OSKs and how they are to be activated are given.

⁹² ITAR-TASS News Agency, 31 October 2012, "Russian Naval Headquarters Moves to Petersburg" [http://www.itar-tass.com/en/c154/560174.html].



Figure 4. Russia's military district organization until December 1, 2010.



Figure 5. Russia's military district organization after December 1, 2010. The number of MD's decreased from six to four and at the same time they became strategic joint commands.

Chief of General Staff, Army General Nikolai Makarov commented on the effects of the reorganization in a speech in Helsinki in June 2012. He pointed out that joint command of army, navy, air force and air defence units resulted in a qualitative improvement of combat capability in all military districts. Less reaction time is needed in crisis situations. At the same time the strike force of the military districts increased and ambiguities concerning command authority were removed.93

⁹³ YLE News, 7 June 2012, "Kenraali Makarovin puhe kokonaisuudessaan" (General Makarov's Full Speech), [http://yle.fi/uutiset/kenraali_makarovin_puhe_kokonaisuudessaan/6169951]. The commander of the former Leningrad MD had only the military assets and forces of that military district at his disposal. Now the commander of the Western MD has at his disposal the combined assets and forces of the former Leningrad MD, the Moscow MD, the Northern and Baltic Fleets and the 1st Air Force and Air Defence Command, and in times of crisis also the military units of the other power ministries.

The defence reorganization in Russia can be seen as a long-term security policy reaction to the major geopolitical changes that have already occurred, when NATO members are now her bordering neighbours. At the time of the collapse of the Soviet Union, Finland was perhaps regarded "neutral." With Russia's gradual recovery from 2000 on, Finland is probably now regarded as a virtual NATO member state. On a lower diplomatic level, Finland has been warned that NATO membership would trigger countermeasures. 95

At the same time, the economic significance of Russia's north-western area is clearly rising. In northern waters there are large natural reserves. Along with climate warming, the northern sea routes seem to be taking on a larger role. It is quite probable that the competition for influence in the arctic areas will grow. Russia views the Arctic in very different terms from all other littoral and nearby states, and takes any "foreign" interest in the area as an indication of hostile intent which may require a securitized response. 96

In the Baltic Sea area, Russia has lost her former military superiority. At the same time the area is more important to her, because of the new Nord Stream gas pipeline and commercial traffic, especially oil transports. The significance of the St. Petersburg defensive zone and the entire north-western direction are emphasized in this new situation.⁹⁷

An indication of how Russia assesses the importance of the various regions of the country can be obtained by comparing the regional distribution of her armed forces units. There are about 100 brigades in permanent readiness, 36 of which are deployed in Western MD, 26 in Eastern MD, 23 in Southern MD and 15 in Central MD. Airborne troops, naval infantry, coastal missile brigades and contingents abroad are often omitted in western and some Russian assessments.⁹⁸

⁹⁴ The Soviet Union finally recognized Finnish neutrality during President Mikhail Gorbachev's official state visit in Finland in 25–27 October, 1989.

⁹⁵ Kozin, 2007. According to several Finnish and other sources, Dr. Kozin acted on direct orders from Moscow, and expressed this view in no unclear terms, both in the seminar and later in interviews on the major Finnish TV Channels YLE and MTV3; МИНИСТЕРСТВО ИНОСТРАННЫХ ДЕЛ РОССИЙСКОЙ ФЕДЕРАЦИИ, ФИНЛЯНДСКАЯ РЕСПУБЛИКА (The Ministry of Foreign Affairs of the Russian Federation), 7 November 2011. The Ministry of Foreign Affairs of the Russian Federation noted on its homepage in November 2011, that Finland is not excluding the possibility of joining NATO in the event of changes in the geopolitical situation and that the Defence Forces of Finland, as far as technical and organizational relationships are concerned, is fully compatible with NATO standards.

⁹⁶ Smith & Giles, 2007.

⁹⁷ Mukhin, 2009.

⁹⁸ See Annex 2. See also Barabanov (ed.), 2011 as well as Vendil Pallin, 2012a and *War-fare.be*.

The regional distribution of armed forces units certified to employ nonstrategic nuclear weapons is another good indication. Half of the active depots are in the Western MD, supporting more than twenty dual-capable units.⁹⁹ Twelve of these are located in the Kola and in the neighbourhood of St. Petersburg and in Kaliningrad.



Figure 6. The regional distribution of active non-strategic nuclear weapons depots. Six out of twelve depots are in the Western MD, supporting nuclear certified units (Adapted from Sutyagin, Atomic Accounting, RUSI, November 2012).

The Central European direction is probably not as militarily significant to Russia as it was previously. Therefore the military centre of gravity in the new Western MD - not to be misinterpreted as the national military centre of gravity – seems to have been shifted to the northwest, perhaps as a preventive measure. 100 An indication of this is the deployment of the first Iskander missile brigade in Luga. In the worst case scenario of the Cold War, the massive ballistic and cruise missile attack on Russia would have come from the north and northwest and some of the missile trajectories could have passed over Finnish territory.

For NATO the Baltic Sea has become almost an inland sea. Only the Kaliningrad enclave has remained as an isle from which Russia can negate the other

⁹⁹ Sutyagin, 2012.

¹⁰⁰ Professor Stephen J. Blank confirmed this assessment at the Q/A session after his presentation at FIIA, Helsinki, 8 November 2011. He pointed out that there is a clear trend towards strengthening the defence at the country's periphery. The same can also be seen in the east. See also STRATFOR, 7 December 2011, Estonia's Defensive Options Against Russia [http://www.stratfor.com/analysis/20111206-estonias-defensive-options-against-russia]; See further Bidder, 2011 and Leijonhielm, 2012, p. 89.

countries' almost total control of the sea. However, Russia can, if need be, prevent her opponents from using the Baltic Sea waters, with the exception of the Gulf of Bothnia, by the use of new air-launched and ground-launched missiles.

DEVELOPMENT OF RUSSIA'S MILITARY POTENTIAL

4.1 Potential, not Intentions, Determines the Development Needs

t the Russia-NATO Council meeting in Bucharest in April 2008, President Vladimir Putin referred to Otto von Bismarck's well-known view that capability, not intentions, matters most. ¹⁰¹ This is the classical starting point of defence planning. Building defence capability is a long-term process. Political intentions, however, may change overnight. Therefore it is prudent to analyze a country's military potential rather than its current political situation.

Prime Minister Putin laid out the future of the Armed Forces in December 2009 as follows:

The Russian Armed Forces must keep up with modern challenges in order to reliably ensure national security. The military reform is crucial to making the military leaner and meaner, enabling it to deal with any conflicts that could arise. New types of arms, new equipment and new methods of waging war are necessary for that.¹⁰²

It is evident that Russia needs in the western direction small, efficient and flexible strike units in a high state of readiness, and which can be quickly reinforced when necessary. "The nature of threats has become such that operations on a regional scale can start suddenly", the Chief of the General Staff, Army General Nikolai Makarov said on November 17, 2011. Behind this assessment it is possible to discern the thoughts of one of Russia's most prestigious military thinkers, Army General (ret.) Makhmut Gareev, president of the Academy of War Sciences. He strongly doubts the credibility of tactical nuclear weapons as general-purpose weapons in local conflicts. Mindful of

¹⁰³ Tikhonov et al., 2011.

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President of Russia, 2008a. According to President Vladimir Putin, "You know, I have a great interest in and love for European history, including German history. Bismarck was an important German and European political leader. He said that in such matters, what is important is not the intention but the capability." See also RLA Novosti, 31 May 2008, "Russia opposes NATO expansion in principle – PM Putin.", According to Putin, "As Bismarck said long ago, what really counts is potentials rather than goodwill intentions or statements". During an interview for Le Monde in late May 2008 Putin said that, "And all we see is that military infrastructure is getting closer and closer to our borders. Why? Nobody threatens each other anymore".

¹⁰² RLA Novosti, 3 December 2009, "Putin Reiterates Need for Military Reform to Ensure Security [http://en.rian.ru/russia/20091203/157086584.html].

Russia's experiences of war, he thinks it is time to assess the merits of the decisive importance not only of the initial period of war, but above all the first strategic strike. "More aggressive actions may be needed and pre-emptive actions as well, if necessary." ¹⁰⁴

The Commander of Russia's Ground Forces Col. Gen. Vladimir Chirkin stated in July 2012 that Russia will form 26 additional brigades by 2020, including 10 reconnaissance brigades, 14 army aviation and two air defence brigades. 105

On the other hand, large reserves are needed in the direction of China. President Medvedev announced in April of 2011, that Russia has to retain general conscription for 10–15 years. Russia is also preparing for the most extreme alternative, a large-scale war. 107

Minister of Defence Anatoly Serdyukov repeated in October 2012, that Russia will not do away with the draft any time soon. "An entirely professional army is optimal in my view," he said. "But we cannot afford it for the foreseeable future," adding that for now the armed forces will include a mix of professionals serving under enlistment contracts and draftees. Mr. Serdyukov's dismissal in November 2012 supports the view that powerful circles in Russia that have not been happy with the concept of a small "New Look" Army, succeeded to limit it. Mr. Serdyukov's successor, Army General Sergei Shoigu has clearly changed direction. The end result of the Russian defence reform seems to be a mix of modern and more traditional armed forces, with a sufficiently large trained reserve.

The recruiting of contract soldiers is one of the central factors in the process of improving capability, but at present it has not produced the desired result. The lack of trained non-commissioned officers is a problem. Therefore readiness and combat capability have not yet risen to the planned high level. General Makarov, however, reported that all units and formations in the category of permanent readiness have been reinforced to full combat strength.

¹⁰⁴ McDermott, 2011, pp. 67-68. See also Miranovitsh, 2009.

¹⁰⁵ RLA Novosti, 16 July 2012, "Russian Military to Form 26 New Brigades by 2020" [http://en.rian.ru/mlitary_news/20120716/174634711.html].

¹⁰⁶ RLA Novosti, 4 April 2011, "Russia to Continue Military Conscription for 10–15 Years – Medvedev" [http://en.rian.ru/mlitary_news/20110404/163367728.html].

¹⁰⁷ Daily Mail, 18 November 2011, "Nuclear War Could Erupt along Russia's Border with Europe, Warns Kremlin Commander" [http://www.dailymail. co.uk/news/article-2062865/Nikolai-Makarov-Nuclear-war-erupt-Russias-borders-Europe.html].

¹⁰⁸ RLA Novosti, 7 October 2012, "Russian Military Pay Rises, but Draft to Remain – Chief" [http://en.rian.ru/mlitary_news/20121007/176467212.html]. For a more detailed analysis, see McDermott, 2012a.

¹⁰⁹ McDermott, 2013.

¹¹⁰ McDermott, 2011. See also, Felgenhauer, 2011.

These units are to be ready to execute combat operations within one hour after receiving orders. 111 In practice, however, it is evident that 'permanent readiness' brigades will not appear as originally planned, to be able to maintain daily readiness at full strength. Rather there will be combat units of battalion strength in permanent readiness. 112 Colonel General Valery Gerasimov, successor to Army General Nikolai Makarov as Chief of the General Staff, pointed out in January 2013 that "no one rules out the possibility of a major war, and it cannot be said that we are unprepared". 113

In 2008, the period of conscript service was reduced from two years to one. According to announcements made in the spring of 2011, the earlier goal of over 550 000 draftees annually was reduced to 400 000. 114 The call-up in fall 2011, less than 136 000 men, was not encouraging and this raises doubts as to the possibilities to reach stated goals.¹¹⁵ If the modernized armed forces can pool up 300 000 conscripts annually, a challenging goal, the system will produce even in the future a reserve of several millions of trained reservists under the age of 35. A report published by the prestigious Valdai Club in July 2012, states:

Thus, by the end of 2011 it is assumed that the million-strong army will consist of 220 000 officers, 425 000 contract soldiers, and 350 000 conscripts. The latter figure is much more realistic compared to the previously planned 700 000. However, it remains to be seen whether the Defense Ministry will be able to assemble a 400 000strong corps of contract personnel. 116

Because of the military organizational changes, the current conscript service crisis in the Russian Armed Forces and the negative demographic develop-

The ambitious aim is to improve combat readiness for the frontline units to just 1-2hours after given orders. Tikhonov, Aleksandr et. al., 2011; IHS Jane's World Armies, 15 November 2012, "Russian Federation." Jane's World Armies estimated in November 2012 that the majority of the Airborne Forces can be deployed within 12 hours while the bulk of the Ground Forces should be operational within 24 to 48 hours, albeit in many cases with 20-40 percent deficit in vehicles. See also Litovkin, 2010 and Estinko, 2010.

¹¹² McDermott, 2012.

¹¹³ Litovkin, 2013; RIA Novosti, 26 January 2013, "Russia's Forces Are Ready for War

⁻ Army Chief' [http://en.rian.ru/mili-tary_news/20130126/179040460/Russias-Forces-Are-Ready-for-War-Army-Chief.html].

¹¹⁴ Felgenhauer, 2011.

¹¹⁵ Carlsson & Norberg, 2012, pp. 102–03. See also Russian Defence Policy, 6 January 2012, "No One to Call (Part I)" [http://russiandefpolicy.wordpress.com/2012/01/06/noone-to-call-part-i/]. The number of conscripted young men during 2011 was altogether 354,570, according to Russian Ministry of Defence. It is too early to tell if the steep decline in conscription figures in the fall of 2011 will prove to be permanent. According to official Russian census figures there should be about two million young men of 18-19 year's age, but some 800 000 seem to be able to evade conscription service without legally acceptable reasons.

¹¹⁶ Barabanov, Makienko & Pukhov, 2012, p. 28

ment, it is uncertain if the stated goals will be achieved. The trained reserve in 2011 may in theory be 8 million, but the real figure is probably significantly lower, perhaps two million, because of lack of refresher training and equipment. Some clarification was given by Chief of General Staff, Army General Nikolai Makarov in November 2011: "We have a mobilization reserve of 700 000 men, we have brigades that may be put on war footing. Practically the entire mobilization reserve of the Army consists of conscripts."

One major problem not to be omitted seems to be the mobilization system itself, largely inherited from Soviet times and not very well adapted to the new defence structure. A sign of improvement is the mobilization of 4 000 reservists in the vicinity of Petrozavodsk, Karelia, where the 216th Storage and Repair Depot is located, facilitating the first exercise of a fully manned Motorized Infantry Brigade since 1993. The exercise was held 13-30 September 2012. Depot 12. Depot 12. Depot 12. Depot 12. Depot 12. Depot 13. Depot 13. Depot 13. Depot 14. Depot 14. Depot 14. Depot 15. Depot 15. Depot 15. Depot 16. De

4.2 The Development of Russia's Military Potential and Armaments

Russia has reduced her peacetime armed forces. After the difficult economic years, the country has accordingly increased her defence spending. This trend also grows stronger. The starting level was indeed low, but even after taking inflation corrections into account, the annual growth of the defence budget has been 10 to 15 percent. In 2011 the share of defence expenditures in the national budget exceeded 20 percent. President Medvedev stated in March 2011, that the money spent on defence (including military-related spending of the other power ministries) would rise to 4.5 percent of GDP in 2012. The actual outcome for 2012 will be slightly higher and since the planned defence expenditure growth for 2013–2015 is expected to be at approximately 12 per-

¹¹⁷ RLA Novosti, 17 November 2011, "Russian Military Has No One Left to Draft" [http://en.rian.ru/mlitary_news/20111117/168776056.html].

¹¹⁸ IHS Jane's World Armies, "Russian Federation"; IISS, 2012, p. 192 and Tikhonov, 2011.

¹¹⁹ *PWA Новости*, 17 November 2011, "Генштаб: мобилизационный резерв армии РФ составляет 700 тыс человек" [http://www.ria.ru/defense_safety/20111117/490941556.html].

¹²⁰ Boltenkov, Gayday, Karnaukhov, Lavrov & Tseluiko, 2011, pp. 9–31.

¹²¹ TV Zvezda, 26 September 2012, "Command and staff mobilization exercises in Karelia – *Krl 299*" (Валерий Жевлаков, НОВОСТИ ДНА) [http://www.youtube.com/watch?feature=player_embedded&v=dWOyWraAJhE#]. Simultaneously manoeuvres involving 7 000 troops in the Murmansk region took place. See *TV Zvezda.ru*, 27 September 2012 [http://www.youtube.com/watch?v=o5r_xuR8-os&feature=plcp].

¹²² A look at IISS Military Balance yearbooks 2006 to 2012 shows that the defence spending grew steadily between 2005 and 2011, regardless of the economic problems created by the financial crisis in 2008. A marked jump in defence spending took place in 2009 and this trend seems to be reinforced.

¹²³ Cooper, 2012. See also Leijonhielm, 2012.

¹²⁴ *Military Parade*, 2 (104), March/April 2011, p. 4.

cent annually, spending has now reached a level that is generating strains on the budget and could prove unsustainable, especially if another round of crisis were to afflict the global economy. 125

As the State rearmament program for 2007-2015 had encountered serious problems from the very beginning, President Medvedev stated in March 2010 that a new and far more ambitious programme for 2011-2020 would be announced later that year. 126 The first figure mentioned for funding of the armament program was 13 trillion roubles. Defence Minister Serdyukov disclosed in September 2010 that the figure would rise to 19 trillion roubles (approximately 500 billion euros). 127 In an interview, Serdyukov said:

This is the minimum we need to equip our armed forces with modern weaponry. We could ask for a bigger number, but we need to understand that the budget cannot afford such spending, so 19 trillion is a serious amount of money that will provide considerable orders for our defense industry.

When funding for refurbishment of the worn out defence industry infrastructure is included, the sums rise even higher. Prime Minister Putin declared in March 2011:

I'd like to remind you that we plan to allocate over 20 trillion roubles for this current programme through 2020, which is three times more than we allocated towards the previous one. These are very substantial funds, and as you can understand, they will have to come at the expense of other areas. But I believe that we are justified in investing in the defence industry inasmuch as it is by nature a high-tech industry. 128

Russia's Minister of Finance, Alexey Kudrin, who opposed high defence expenditure, was dismissed in late September 2011. 129

¹²⁷ Arkhipov & Pronina, 2010. Minister Serdyukov's remark hinted at a request for more than 30 trillion roubles that the generals had calculated would be needed to restore the

¹²⁵ Mukhin, 2012; Cooper, 2012.

¹²⁶ President of Russia, 2010b.

¹²⁸ Government of the Russian Federation, 21 March 2011. See also *Military Parade*, 2(104), March/April 2011, "Modernization of Army – A Priority Objective", pp. 4-7, and "Defence Industry Pivotal Modernization – A Priority", pp. 8–9. The planned defence spending for 2011-2020 is equivalent to about 500 billion euros. "The money is available, it is necessary to bring order", according to Medvedev. See also RIA Novosti, 27 September 2011, "Medvedev defends high military spending"

[[]http://en.rian.ru/mili-tary_news/20110927/167180695. html].

^{129 &}quot;I have differences with Medvedev on economic policy; they basically have to do with the considerable military spending", Alexey Kudrin said in September 2011. See Grinkevich, 2011. According to President Medvedev, "I as the Supreme Commander in Chief, and my colleagues will always insist that spending on defence, new weaponry, service pay, proper living conditions for servicemen...be the state's top priority... And whoever disagrees with this should work elsewhere." See RIA Novosti, 27 September 2011, "Medvedev Defends High Military Spending"

Deputy Prime Minister Arkady Dvorkovich defined the priorities of the State as follows in October 2012:

We cannot allow ourselves to simultaneously have a very high level of social protection in a system built on paternalistic principles, at the same time a very large army, and at the same time a very large amount of state property conjointly with very low prices for energy resources within the country. ... Choose one, two at most. 130

Deputy Prime Minister Dmitry Rogozin, also chairman of the Military-Industrial Commission said in September 2012 that from now on national defence spending must be 3.5 percent of GDP.¹³¹ This does not include the ca 1.5 percent military related other spending.

The well-known expert on Russia's defence economy and industry, Professor Julian Cooper, wrote:

It has become clear that President Putin and the Prime Minister, Dmitry Medvedev, are resolutely committed to the full implementation of [the State Armament Programme, Gosudarstvennaya Programma Vooruzheniya, GPV-2020] even if it requires a larger defence burden on the economy.¹³²

Summing up, the position of the Russian leadership is clear. The rearmament program is in fact seen as a means to boost the growth of the entire Russian industry, the same way as in the 1930s. This may prove to be an illusion. If the national economy cannot sustain such an ambitious defence program, so-cial programs will have to yield. If the acquisitions are realized, actual defence spending would increase substantially in coming years, perhaps as much as 50

[[]http://en.rian.ru/mlitary_news/ 20110927/167180695.html].

Russia Beyond the Headlines (RBTH), 3 October 2012, "Authorities: Not Possible to Support Social Protections, Large Army, Many State Properties Simultaneously" [http://rbth.ru/articles/2012/10/03/authorities_its_not_possible_to_support_social_protections_large_arm_18779.html].

¹³¹ *Взгляд*, 17 September 2012 "Рогозин: Расходы на оборону должны быть на уровне 3,5% ВВП" [http://www.vz.ru/news/2012/9/17/598406.html].

Today, 27 September 2011, "No Pain, No Gain: Big Defense Spending to Continue, Says Medvedev" [http://rt.com/politics/defense-budget-remain-priority-469/]; РИА Новости, 21 November 2011, "Медведев пригрозил НАТО из штаба самой воюющей армии России" [http://ria.ru/defense_safety/20111121/494300754.html]; Российская газета, 20 February 2012, "Владимир Путин: "Быть сильными: гарантии национальной безопасности для России""

[[]http://www.rg.ru/ 2012/02/20/putin-armiya.html].

¹³³ President of Russia, 2012a; Reuters, 31 August 2012, "Putin Calls for Stalin-Style

[&]quot;Leap forward" [http://www.reuters.com/article/2012/08/31/us-russia-putin-stalin-id USBRE87U16420120831]; RLA Novosti, 2 May 2012, "Rearmament of Russian Army to Boost Economy – Dvorkovich"

[[]http://en.rian.ru/mlitary_news/20120502/173165 137.html].

percent. The greatest impact would be at the end of this decade. 134 Deputy Prime Minister Dmitry Rogozin announced a detailed breakdown of the planned annual expenditure at the end of 2012. "The state defence order will reach about 1.9 trillion roubles next year [i.e. 2013], about 2.2 trillion in 2014 and 2.8 trillion in 2015", and is expected to stay at that level until the end of the decade. 135

The official Russian plans regarding defence expenditure have been received with various degrees of scepticism in the west. The prognosis of the Russian defence economy until 2020, made by the Swedish Defence Research Agency (FOI) using a range of realistic growth figures for the whole economy as well as for the defence budget, shows that the defence budget is likely to increase 50–100 per cent in real terms during this decade. 136

Carrying out the armaments program, will not, however, be easy for Russia because of the severe crisis in the defence industry. The problems are largely systemic in nature, which adds to the difficulty of finding lasting solutions. Among the major problems are corruption¹³⁷ and flawed business management practices, excessive brain drain, Soviet-style inefficient production methods, obsolete production machinery and aging personnel. According to Professor Cooper, the defence industry has lost four million workers during the last 20 years – the present manpower figure is now about 1.5 million – and that the average age of workers is 55 to 60 years. The percentage of those under 30 is only 0.5 percent. Similar estimates are presented in the respected defence publication Nezavisimoe Voennoe Obozrenie (NVO). 139

As an illustration of how the Russian leaders tackle the problems, President Medvedev demanded in May 2011 that the government present ideas for making investments in national defence more effective and the military to submit tenders without delay. Otherwise a number of weapons systems, vital for Russia would not be delivered, as was the case in 2009. 140 Then, 30 strategic missiles, three nuclear submarines, five Iskander missile systems, 300 armored vehicles, 30 helicopters, and 28 combat aircraft were not delivered to the armed forces.

¹³⁴ Cooper, 2012, See also Cooper, 2012a.

¹³⁵ RLA Novosti, 27 December 2012, "Russia to Triple State Defense Order by 2015" [http://en.rian.ru/military news/20121227/178443375.html].

¹³⁶ Oxenstierna & Bergstrand, 2012, pp. 57–58.

¹³⁷ Professor Stephen J. Blank estimated that about 20 percent of Russia's defence spending disappears because of corruption. Presentation at FIIA, Helsinki, 8 November 2011. ¹³⁸ Nikishenkov, 2011.

¹³⁹ Miasnikov, 2011. See also McDermott, 2011b.

¹⁴⁰ RIA Novosti, 10 May 2011, "Russian Defence Industry Needs Investments – Medvedev" [http://en.rian.ru/mlitary_news/20110510/163957676.html].

Russia's Deputy Prime Minister Sergei Ivanov said that the situation had not really changed for the better.¹⁴¹ Responsible managers have been sacked, but that doesn't solve the systemic problems.

Great efforts have, however, been made in order to improve the conditions of the defence industry. In October 2011 Prime Minister Putin reported on an additional financial input of 3 000 billion roubles (about 72 billion euros) to improve the industrial production base. According to Prime Minister Medvedev, Russia will pay special attention to the development of aircraft construction and shipbuilding, as well as the radio-electronic, space and nuclear industries in the next few years. "The military-industrial complex will receive a serious impetus. It should become a source of technological innovation, both in the military and civilian sectors", Medvedev said on 31 January 2013. 143

The defence industrial focus is, however, shifting from research and development to production, even though resources for research show growth in absolute terms. One may, perhaps, doubt the credibility of official announcements, which deal with the huge economic appropriations for materiel acquisition during the period until 2020. Nevertheless, one can expect that all armed forces in the Russian Federation will be substantially strengthened.¹⁴⁴

In 2010, Russia still had over 20 000 main battle tanks (MBTs), a large number of them are older types and are in poor condition. Future needs were announced to be 10 000 MBTs. ¹⁴⁵ Of these, 4 500 are modernized T-80's and 600 new T-90 types. ¹⁴⁶ Some of the T-72 MBTs are being modernized. ¹⁴⁷

¹⁴¹ RIA Novosti, 19 May 2011, "Russian State Defence Order Still in Bad Shape – Govt" [http://en.rian.ru/russia/20110519/164111503.html]; RIA Novosti, 17 May 2011, "Russian High-Ranking Officials Sacked over State Defence Order" [http://en.rian.ru/russia/20110517/164078046.html].

¹⁴² Rosbalt, 6 October 2011, "Премьер-министр РФ: В бюджете-2012 возрастут расходы на военные нужды" (Prime Minister: The Budget 2012 Will Increase Military Spending) [http://www.rosbalt.ru/business/2011/10/06/898103.html].

¹⁴³ RLA Novosti, 31 January 2013, "Russia to Prioritize Military Industry – PM Medvedev" [http://en.rian.ru/military_news/20130131/179152543/Russia-to-Prioritize-Military-Industry---PM-Medvedev.html].

Oxenstierna, 16 February 2011, p. 13 and 24. According to Susanne Oxenstierna, "It is questionable if the goals will be met, but it is clear that materiel procurement will consume an ever growing portion of the defence budget and seems to be prioritized." See also Mukhin, 2010. It is pointed out in the FOI report that the procurement program plans are indicative, not mandated by law. See also IHS Jane's World Armies, "Russian Federation", 15 November 2012. JWA estimates that "between 2012 and 2016 alone Russia will commit more than USD 18 billion to land forces procurement programmes, which even when taking into consideration any misallocation of funds or an unrealistic calculation of the budget for the state armaments programme - the planned expenditure should greatly aid attempts to modernise the equipment of the Russian armed forces."

¹⁴⁵ RIA Novosti, 25 February 2010, "Russia's New Ground Forces Chief Urges Drastic Cuts in Tanks" [http://en.rian.ru/russia/20100225/158003606.html].

¹⁴⁶ IISS 2010, p. 223 and Army Technology.com, "T-90S Main Battle Tank"

The MBT inventory and the trained reserves will make it possible in principle to establish of some 200 armoured and motorized infantry brigades. Mobilization on such a scale would, however, take many months to accomplish. During the war in Georgia in 2008, Russia operated mainly with older equipment and did not mobilise.

After introducing the brigade organization in the Russian Army in 2009, forty armoured brigades and infantry brigades, capable of fighting independently ("combined-arms operations") were established. The task of these front-line units is to be in a high state of readiness (with a constant strength of 95 percent and full combat readiness). The armoured brigade has three tank battalions and a total of some one hundred heavy MBTs. The motorized infantry brigade has one reinforced tank battalion (41 heavy MBTs). Altogether these brigades have about 2 000 heavy MBT's. It is believed that less than half of these units were combat ready in 2010.148

Russia has maintained her strong artillery and the principle of massive artillery fire support. A major program to procure new guided rocket launchers and artillery systems was announced in November 2012.¹⁴⁹ Russia's ground forces have about 24 000 artillery pieces, of which over 6 000 are self-propelled artillery vehicles and about 3 500 rocket launchers. ¹⁵⁰ In addition, naval infantry and coastal defence units have more than 700 artillery pieces of various types. ¹⁵¹ Even border units, which do not belong to the armed forces, and Interior Ministry units have some artillery in their inventory.

New types of combat aircraft of the Russian Air Force are, among others, the Su-34 fighter-bomber, the Su-35 multi-purpose strike fighter, and the T-50 PAK FA fifth-generation multi-purpose strike-fighter, which is planned to enter service in the second half of the decade. 152 Russia's goal is to obtain by the year 2020 nearly 1 500 new or thoroughly refurbished aircraft of various

¹⁴⁸ IISS, 2011, pp. 175–176. The situation may have improved as 47 brigades were planned one year later. See also IISS, 2012, p. 187.

[[]http://www.army-technology.com/projects/t90/].

¹⁴⁷ Gulyaev, 2011, pp. 10–13.

¹⁴⁹ RLA Novosti, 19 November 2012, "Russia Developing 200-km Range Rocket System" [http://en.rian.ru/military news/20121119/177581650.html] and RIA Novosti, 22 November 2012, "Russia to Build New Artillery, Air-Defense Systems" [http://en.rian. ru/military_news/20121122/177676314.html].

¹⁵⁰ IHS Jane's World Armies, "Russian Federation", 15 November 2012.

¹⁵¹ IISS, 2012, p. 196.

¹⁵² Air Power Australia [http://www.ausairpower.net/APA-2010-01.html] and RIA Novosti, 27 October 2010, "Russia, India to Begin Design of 5G-Fighter in December" [http://en.rian.ru/mlitary_news/20101027/161108468.html].

types, including 600 combat aircraft, 1 000 helicopters, and some 200 new airdefence missile systems.¹⁵³

Development of the Russian Navy is primarily focused on developing and producing nuclear ballistic missile- carrying strategic submarines and their missiles as well as nuclear attack submarines. 154 It is important for Finland and her small neighbouring countries to observe Russia's remarkable input to return to her invasion capability. Russia will procure four large Mistral amphibious assault landing ships (LHD) from France. Two of them will be built in Russia. 155 The Mistral LHDs can carry 16 helicopters, four landing craft, and an entire tank battalion, i.e. some 30 MBTs. In addition, five Ivan Gren type landing craft are being built in Kaliningrad. Each of them can transport 13 MBTs or 60 armoured personnel carriers (APCs). 156

While obtaining new naval ships and dismantling older types, the total inventory may continue to decrease. Contrary to earlier practices, Russia also aims to purchase other types of modern military technology from the West. For example, Russia buys hundreds of recce/patrol vehicles from France and Italy, and an advanced ground forces combat simulator from Germany as well as UAVs from Israel.¹⁵⁷ The change of leadership in the Russian military community as well as technical difficulties concerning hardware procurement from the West, have reversed the trend. Co-operation with the West is not longer regarded as attractive as a few years ago. 158

Vladimir Putin explained his position on the rearmament program in the Russian government daily Rossiyskaya Gazeta in February 2012 as follows:

I am convinced that no "pinpoint" purchasing of military hardware and equipment can be a substitute for the production of our own types of armaments, it can only serve as the basis for obtaining technologies and knowledge. Incidentally this has happened before in history. Let me remind you that the whole "family" of our country's tanks in the 1930s was produced on the basis of American and British machines. And then,

¹⁵³ RIA Novosti, 1 December 2010, "Russian Air Force to Procure 1,500 New Aircraft by 2020" [http://en.rian.ru/mlitary_news/20101201/161580969.html].

¹⁵⁴ RIA Novosti, 3 December 2011, "Russia to Start Construction of Borey-A Class Subs in 2012" [http://en.rian.ru/mlitary_news/20111203/169263294.html] and RIA Novosti, 3 December 2011, "Russian Navy to Receive 1st Graney Class Attack Sub by End of 2012" [http://en.rian.ru/mlitary_news/20111203/169275854.html].

¹⁵⁵ RLA Novosti, 2 December 2011, "Russia to Build Hlls of 2 Mistral-Class Warships" [http://en.rian.ru/world/20111202/169255665.html].

¹⁵⁶ Leijonhielm, 2012, p. 89.

¹⁵⁷ Giles, 2012, p. 16.

¹⁵⁸ Eurasia Daily Monitor, 24 January 2013, "Russia Is Isolated Politically and Technologically as Relations with West Worsen" [http://www.jamestown.org/single/? no_cache=1&tx_ttnews[tt_news]=40358&tx_ttnews[backPid]=620].

using the experience accumulated, our specialists developed the T-34 - the best tank in World War II.

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In the coming decade the troops will take delivery of more than 400 modern groundand sea-launched intercontinental ballistic missiles, eight strategic missile submarines, around 20 multi-role submarines, more than 50 surface warships, around 100 military satellites, more than 600 modern aircraft, including fifth-generation fighters, more than 1 000 helicopters, 28 S-400 regiment-level surface-to-air missile systems, 38 Vityaz division-level surface-to-air missile systems, ten brigade-level Iskander-M systems, more than 2 300 modern tanks, around 2 000 self-propelled artillery systems and cannon, and also more than 17 000 military vehicles.

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The updating of the defense industry complex will be the locomotive that will pull the development of the most diverse sectors in its wake. 159

The outcome of the rearmament program remains to be seen. Some Western experts point out that "the currently envisaged plans for military expenditure do not seem to be sustainable, even if the economic situation does not deteriorate". Interestingly enough, the high command of the Swedish Defence Forces, stated clearly in January 2013, that Russia's "modernisation of her defence equipment is proceeding well". Pushing the programme through with great determination may be possible, but it could be accomplished only by diverting funds from social programs, which could trigger unpopular reactions and social unrest. On the other hand Russia's increasing defence export should be mentioned. Annual revenue during 2011–2012 alone is exceeding 10 billion euro. Annual revenue during 2011–2012 alone

The Director of the U.S. National Intelligence, Lt.Gen. James R. Clapper gave the following assessment of Russia's military capabilities in January 2012:

Moscow is now setting its sights on long-term challenges of rearmament and professionalization. In 2010, Medvedev and Putin approved a 10-year procurement plan to replace

¹⁶⁰ It is likely, that the next refinement of the State rearmament program will take place at about 2015, when GPV-2025 would be announced. Long-term programs with a timespan of ten years very seldom materialize as such anywhere in the world.

¹⁶¹ Cooper, 2012a.

¹⁵⁹ Putin, 2012.

¹⁶² Försvarsmakten kommenterar (The Defence Forces comments), 14 January 2013, Försvarsmaktens anförande i Sälen 2013: Kartan och verkligheten (The Defence force's presentation in Sälen 2013: The map vs. reality, Peter Sandwall) [http://blogg. forsvarsmakten.se/kommentar/2013/01/14/forsvarsmaktens-anforande-i-salen-2013/]. The speech at the annual Swedish national security conference Folk och Försvar (Society & Defence) was to be delivered by Supreme Commander, General Sverker Göranson, but due to acute illness he was replaced with the Director General of the Swedish Defence Forces, Mr. Peter Sandwall.

¹⁶³ Cooper, 2012a.

Soviet-era hardware and bolster deterrence with a balanced set of modern conventional, asymmetric, and nuclear capabilities. However, funding, bureaucratic, and cultural hurdles—coupled with the challenge of reinvigorating a military industrial base that deteriorated for more than a decade after the Soviet collapse—will complicate Russian efforts. [...]

The reform and modernization programs will yield improvements that will allow the Russian military to more rapidly defeat its smaller neighbors and remain the dominant military force in the post-Soviet space, but will not—and are not intended to—enable Moscow to conduct sustained offensive operations against NATO collectively. In addition, the steep decline in conventional capabilities since the collapse of the Soviet Union has compelled Moscow to invest significant capital to modernize its conventional forces. At least until Russia's high precision conventional arms achieve practical operational utility, Moscow will embrace nuclear deterrence as the focal point of its defense planning, and it still views its nuclear forces as critical for ensuring Russian sovereignty and relevance on the world stage, and for offsetting its military weaknesses vis-à-vis potential opponents with stronger militaries.¹⁶⁴

¹⁶⁴ Clapper, 31 January 2012.

CHARACTERISTICS OF RUSSIA'S USE OF FORCE

Russia's operational plans are naturally secret, but by analysing the background and decisions regarding defence policy, deployments of armed forces units, military exercises and literature, one can present some estimates. As outlined earlier and based upon her strategic decisions, Russia is developing those of her armed forces that are in their own garrisons capable for immediate action in different directions. According to the country's traditional military thinking, the aim is to keep warfare outside the homeland territory. In dimensioning the capacity of her own armed forces facing west, Russia assesses the capabilities of the United States and NATO.

In Russian thinking, high combat readiness of forces is nothing new. For example, Soviet forces in East Germany were ready to start "defence battle" by immediate attack. This was told by Colonel General Matvei Burlakov (the former Commander-in-Chief of the Soviet Forces in East Germany) in 2005. 165

A high state of readiness is an exceptionally great advantage in offensive operations, especially if the troops can be ordered into action directly from basic readiness. The possibility for successful surprise to the detriment of the adversary is then most favourable, since the enemy's intelligence has not been able to detect anything very alarming, but mainly contradictory signals or signals difficult to interpret. It seems improbable that governments would make difficult and costly decisions for mobilization on such shaky grounds. Thus Russia's striving to reach a high degree of basic readiness is logical defence planning. After reaching such high readiness capability, the Russian armed forces' ability to achieve their military objectives even with limited resources must be deemed as being good.

For the time being Russia seems only to have embarked on the road to such higher readiness. Lieutenant General Vladimir Shamanov, commander of the airborne forces suggested in 2009 that:

It makes sense to move to a three-way troop training system. While one battalion is sending people on leave, the second is at some distant range, the third will be carrying out combat training at its place of deployment. ... It is on combat duty. The events in

¹⁶⁵ Kalashnikova, 2005. An English version, "All They Had to Do Was Give the Signal" is found at [http://www.kommersant.com/ page.asp?id=558042].

South Ossetia have shown the necessity of maintaining a fist of 5-10 battalions which are always ready to fight. 166

The President of the Academy of War Sciences, Army General Makhmut Gareev, pointed out in December 2009 that it is impossible in modern conditions to resist a massive first strike. It is crucially important to analyze not only the initial period of war, but primarily the first strategic assault. "Therefore, as in the fight against terrorism, we need more offensive action, and, if necessary, pre-emptive action."167

In 1996 Lieutenant General (ret.) Valery Dementyev, a defence analyst and military adviser to the Russian President, the Ministry of Defence and the General Staff, jointly with defence analyst Dr. (Tech.) Anton Surikov described in an exceptionally frank manner the characteristics of an operation similar to "strategic assault":

In the first stage, aviation, special military intelligence (GRU) forces, and special Federal Security Services (FSB) and Foreign Intelligence Service (SVR) groups carry out strikes for the purpose of destroying or seizing the most important enemy targets and eliminating the enemy's military and political leadership. Then Mobile Forces, with the support of army and frontline aviation and naval forces, crush and eliminate enemy forces and take over their territory. After that, subunits of Ground Forces and Internal Troops of the Ministry of Internal Affairs, RF, preferably with some combat experience, move in. They establish control of the most crucial locations and carry out "cleansing" of the territory. Then, with the help of militia formed out of the pro-Russian part of the local population, they establish control over the territory and ensure the elimination of nationalists and deportation of some categories of citizens from certain locations. It should be emphasized that until the end of the special operation, local authorities are needed only insofar as they are useful in supporting military control over the territory. 168

Detailed information of Soviet military contingency plans for occupation of Helsinki, bearing a striking resemblance with the general outline for a strategic

¹⁶⁷ Miranovitsh, Gennady, 2009. See also McDermott, 2011, pp. 67–68. This corresponds well with the traditional Russian defence doctrine of offensive defence.

¹⁶⁸ Dementyev & Surikov, 1996. Dr. (Tech.) Anton Viktorovich Surikov (26 May 1961

circumstances at the age of 48 in November 2009. Surikov's biography can be found at: [http://www.peoples.ru/state/politics/anton_surikov/].

¹⁶⁶ Giles, 2012, p. 13. According to Keir Giles, "Five to ten battalions at real readiness may have greater value in the kind of future conflict envisaged by the Russian military than 85 brigades at theoretical

⁻²³ November 2009) was also a high-ranking officer in the military intelligence service GRU and served as adviser in the government of Yevgeny Primakov and as assistant to Yuri Maslyukov, Chairman of the Defence Industrial Commission. He died in rather murky

assault described above, became public in June 2012.¹⁶⁹ Evaluation of these plans became possible by analyzing very detailed military maps from 1989, made and successively updated by the Soviet Army General Staff.

The Finnish interpretation of what Soviet Cold War contingency planning would have meant, if operations had been executed, can be summarized as follows: Central functions of the Finnish society were to be paralyzed, radio and TV stations knocked out, the Parliament, the Presidential palace and military command centres were to be seized rapidly. Road junctions, harbours, bus depots, railway and metro stations were to be captured, financial institutions, water supply and district heating shut down. The aggressor would strive to defeat any organized military resistance by a steady supply of airborne reinforcements as well as by forces landing from the sea. The general population's will to resist was expected to break down in a few days as hunger and thirst take command. The whole Finnish capital and its surroundings would be occupied and sealed off in a matter of a few days.

An interesting present day comparison is offered by the prestigious Russian Valdai Discussion Club:

Military operations are designed to not only defeat the enemy physically, but also to crush their morale, and not just of the troops but also of the people and the government. Factors such as the depth of support for the war among the general population play an increasingly important role and, accordingly, so does understanding and using culturally specific features of the enemy and his political system, including through exposure via the media.

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The distinction between "civilian" and "military" segments of society is disappearing. The aim of a military campaign is to impact not only the enemy army, but also its society, understood in terms of its cultural as well as its physical aspects. This trend makes it necessary to conduct joint "civilian-military" operations, rather than purely military ones. ¹⁷⁰

If Russia's decision to extend her operations to enemy territory was made one month before execution, some brigades may be ready for deployment. If the decision is made, say, six months in advance, an additional force, roughly 20-30 brigades, could be ready for deployment. Forces available for deployment could be even more, if they are not bound to other directions. Concealment

¹⁶⁹ Salonen, 2012. The existence of these valuable maps in Estonia became known at the time of the Soviet withdrawal from Estonia. Their destruction was averted and Finnish military historian Antero Uitto was later able to acquire them. It is interesting that the Soviet Union placed Finland squarely in the enemy camp, regardless of the FCMA Treaty between the countries, the cornerstone on which Finnish and Russian official political relations were built.

¹⁷⁰ Barabanov, Makienko & Pukhov, 2012, p. 8.

and deception ('maskirovka') are essential parts of activities. The amount of available units will of course be affected by the opponent's reaction as well as his readiness level, and by the role of possible allies and the general situation elsewhere.

5.1 Russia Cannot Tolerate Threats Arising from the Direction of Small Neighbouring Countries

In the light of history, Russia has had a tendency to consider all the areas she has once governed as "legitimate" spheres of interest. While seeking influence, she also sees threats everywhere. In the 1930s, the Soviet Union set as her goal to return her sphere of influence of 1914. In the 1920s, Finland was classified as "neutral", but in the next decade she had already become an "enemy state." Finland became friendly only after the legally binding Treaty of Friendship, Co-operation and Mutual Assistance (FCMA) came into force in 1948. This period lasted for more than four decades.

Russia does not exclude the possibility that foreign powers could in the future use Finnish territory as an avenue of approach towards the St. Petersburg and northern areas. The current changes in Russia's military structure and military build-up close to her western borders support this assumption. The use of Finnish territory for this purpose must be prevented. This issue has once again returned in connection with speculations about Finland's NATO membership. Neither the Soviet nor Russian political and military leadership have ever considered Finland herself a military threat. The solution of the future of the following powers are considered.

Russia's strategic objective with regard to Finland seems then to be to assure that no threat be aimed at her from Finnish territory. From the Russian point of view, the essence is not the intention of either the United States, NATO, or Finland alone, but of military capability.

The military alternatives for the great powers always include intimidation, pressure and threats, and also tailor-made attacks for attaining desired political objectives. In the first phase, vital military, social and economic information networks can be the targets of attack. If the desired objectives are not achieved, more robust measures may be used. Infrastructure assets and ground already seized may be used to advantage in that type of operation. The

¹⁷³ This was confirmed by Russia's Minister of Defence Anatoly Serdyukov during the visit by his Finnish counterpart Stefan Wallin in Moscow on 14 February 2012.

¹⁷¹ Koivisto, 2001, p. 292.

¹⁷² Kilin, 2010, pp. 19–*37*.

¹⁷⁴ Virkkunen, 2007. Ambassador Jaakko Blomberg illuminates further the attempts of the Russian Ministry of Foreign Affairs to negate the Finnish decision of 21 September 1990, to declare the military clauses of the Paris Peace Treaty of 1947 void, which would in fact have curtailed Finnish sovereignty; Blomberg, 2011, pp. 56–58.

control of logistics, highways, railroads and sea transport is significant in this respect.¹⁷⁵

Russia's declaration of new limitations for foreigners, dealing with the purchase of property in land near borders¹⁷⁶, may also stem from security policy. For the sake of military security, Russia may not want possible foreign observation posts in areas, whose owners' rights and potential activities even the officials may have a responsibility to protect.

During the war in Georgia in August of 2008, Russia showed in practice how far she is ready to go, if she feels that a small neighbouring country threatens her national interests.¹⁷⁷ President Putin confirmed in August 2012, that the invasion of Georgia was pre-planned.¹⁷⁸ Russia's concern over the Baltic States' membership in NATO has already been mentioned. Colonel Ari Puheloinen made a thorough research of Russia's geopolitical objectives in the Baltic Sea area at the end of the 1990s. One scenario, "The Rise of Russia," closely reminds one of recent developments.¹⁷⁹

However, if Russia should decide to take action against the Baltic countries, the Finnish Defence Forces would probably be tied up, in order to prevent Finland from becoming a flank threat. The means of such actions could be threatening, various kinds of precision attacks, or even invasion.¹⁸⁰

¹⁷⁵ See cf. Chekinov and Bogdanov, 2010, p. 8

¹⁷⁶ Finland lost about 10 percent of its territory and property to the Soviet Union in 1940 and 1944. Many Finns would want to buy back their former land property, build Summer houses etc. This has proved to be very difficult and Russia applies a far more restrictive policy towards Finns than the Finnish Government towards Russians buying property in Finland.

¹⁷⁷ Agrell, 2010, p. 235 (in Swedish). Professor Wilhelm Agrell, well-known Swedish peace and conflict researcher, is of the same opinion as Russia, but with opposite arguments, that the credibility of the European security regime collapsed in the war in Georgia, at the latest. ¹⁷⁸ Студия "Альфа", г. Тверь, 7 August 2012, "Потерянный день" вся правда о

Войне 08.08.08г." (The Lost Day, the Whole Truth about the War 8 August 2008) [http://www.youtube.com/watch?v=sYQeeFXhOQw]; Ennis, 2012; RIA Novosti, 8 August 2012, "Former Generals Slate Medvedev Over Ossetia War"

[[]http://en.rian.ru/world/ 20120808/175066806.html]; AFP (Yahoo News), 8 August 2012, "Russia Prepared for Georgia War, Trained 'Militiamen': Putin" [http://news. yahoo.com/russia-prepared-georgia-war-trained-militiamen-putin-200115109.html]. See also Felgenhauer, 2012.

¹⁷⁹ Puheloinen, 1999, pp. 50–51.

When the Red Army executed its grand strategic assault in the Baltics in late summer 1944, the Soviet Union tied up the Finnish forces, which still held a considerable strike capability, at Ilomantsi in eastern Finland. The loss of two Red Army divisions was the price the Soviet Union was then ready to pay in order to avert the flank threat.

5.2 Basic Readiness and Its Enhancement

The number of Russian forces in the former Leningrad Military District has changed significantly after the break-up of the Soviet Union. The units withdrawn from East Germany were first concentrated there. Then followed a huge reduction of troops. Now the trend has again been reversed.

The headquarters of the 6th Russian Army was stationed in Petrozavodsk. It is now located near Kasimovo, the "military village" built by the Finns for Russian helicopter units north of St. Petersburg. The headquarters appears to be in charge of the ground forces east and south-east of Finland.

A new motorized infantry brigade was re-established in 2010 in Vladimirsky Lager south of St. Petersburg. It may still be deficient but is likely to belong to the planned units of high readiness. In Kamenka, on the Karelian Isthmus there is an elite motorized infantry brigade. From the weapons depot at Sertolovo, north of St. Petersburg, it is possible to establish a reserve brigade. A helicopter unit in support of these brigades is also stationed on the Isthmus. Furthermore there is an abundance of artillery units in the area, supporting these brigades, including a heavy rocket launcher brigade (Tver) with a range of 80 kilometres. In addition an operational brigade belonging to the Ministry of the Interior is located in Lebyazhie (Лебяжье, Lepäsi).

A particularly significant addition of military potential is the deployment of the new ballistic missile system Iskander-M, with a missile brigade in Luga, south of St. Petersburg. The maximum range of the missile is officially 450 kilometres but may reach 700 kilometres, depending of the weight of the warhead.¹⁸¹

Professor Stephen J. Blank (U.S. Army War College Strategic Studies Institute) underlines that it is no longer political rhetoric, but actual policy when Is-kander-missiles are deployed in the neighbourhood of Finland:

would mean definite violation of the INF Treaty.

Forss, 2012. See also STRATFOR, 30 November 2010, "Russian Missiles on NATO's Border." The first Iskander missiles (one battalion) arrived at the 26th Artillery and Missile Brigade in Luga in the spring of 2010 and were declared operational in mid-December 2010. See also *RIA Novosti*, 14 December 2010, "Western Military District Gets First Iskander Tactical Missile System" [http://en.rian.ru/mlitary_news/20101214/161766995. html]. The brigade was fully equipped with Iskander missiles in mid-2011 and is now combat ready; *Russia Today*, 20 October 20011, "In a Nod to European Missile Defence, Russia Rolls Out the Iskander Missile [http://rt.com/politics/russia-missile-defence-nato-europe-293/]. See also Garavskij, 2011; Isby, 2011. A thorough technical analysis of the missile shows that the maximum range with a 480 kilo warhead is about 700 kilometres and that an upgraded missile using more efficient fuel may reach 1000 kilometres in the future. It is not known that the missile would have been tested at ranges exceeding 500 kilometres, which

Recent deployments of the SS-26 Iskander missile (that comes in both nuclear and conventional formats) in the [former] Leningrad Military District where it could threaten Finland and the Baltic States suggest not just a desire to deter NATO, but also the continuing desire to intimidate Russian neighbors. Should Russia divine a threat in Europe, it reserves the right to place these missiles in Kaliningrad from where it could threaten Poland and even Germany as well.¹⁸²

The dual-capability Iskander missiles in Luga are replacing the older Tochka-U (SS-21 Scarab) tactical missiles with a range of 120 kilometres. The new Iskander-M missiles represent the precision weapons mentioned in the Russian military doctrine. Their range covers the Baltic States and a major part of the Finnish territory. A full Iskander-M brigade consists of 12 launchers, each with two missiles, and 12 missile transporters with an additional 24 missiles.

In Russian defence planning, the Iskander missile systems, including the not yet operationally deployed Iskander-K cruise missile system¹⁸³, seem to have a dual role: on the one hand nuclear deterrence and highly unlikely nuclear warfighting, and on the other an increasingly important conventional offensive role in strategic directions. Tactical ballistic missiles and cruise missiles supplement the ground attack capability of the frontal aviation substantially. The Russian military has great expectations with regard to this missile as a substitute for the missile capability lost after implementation of the INF treaty in the early 1990s. *Military Parade*, a magazine for Russia's defence industry, wrote in the spring of 2011, that the Iskander-M missile, a weapon of choice in theatre operations, with longer range and greater accuracy, was a part of the modernization program of the ground forces. The advanced accurate homing system of this missile (Udarnik) will be completed in 2016.¹⁸⁴

Blank, 2011, p. 331. On 23 November 2011 President Medvedev made a statement regarding the European missile defence issue which included the threat that "Russia will deploy cutting–edge ballistic missile systems capable of the total destruction of US ABMs in Europe. One of the measures will be deploying is the 9K720 Iskander Mobile Theatre Ballistic Missile System in a special area in Kaliningrad."; The Voice of Russia, 23 November 2011, "Medvedev's Special Statement on Missile Defence" [http://english.ruvr.ru/2011/11/23/60905583.html]. See also, Golubkova, 2011.

¹⁸³ If the Iskander-K TEL is equipped with a six-tube launcher, a full brigade would theoretically carry 144 Iskander-K cruise missiles.

¹⁸⁴ Gulyaev, 2011, pp. 10–13.

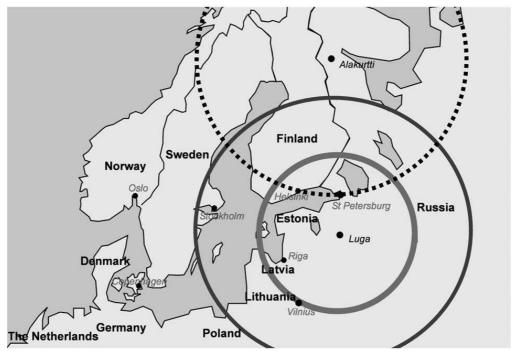


Figure 7. Iskander-M missile range from the 26th Missile Brigade based in Luga. At present there are no Iskander missiles at Alakurtti, but the mobile missile system could be quickly redeployed, if necessary.

In building a capability for strategic assault operations, the Iskander missile brigade in Luga is of fundamental importance. By taking advantage of the opponent's low readiness, precision strikes by this brigade could be used together with air strikes to paralyze his defence. It is interesting to note that units from the 98th Guards Airborne Division in Ivanovo, 400 kilometres north-east of Moscow, exercised in Luga in February 2012.¹⁸⁵

An air assault division is active in the Pskov area, along with a 'Special Designation' (Spetsnaz) commando brigade. In Pechenga there is a motorized infantry brigade and a naval infantry brigade. These brigades are in full readiness (in hours). According to Colonel General Postnikov, then commander of the Russian Ground Forces, an arctic brigade composed of Spetsnaz troops, familiar with arctic conditions, would also be established in Pechenga. In February 2012 it became evident that the plans were postponed to 2015. 186 Chief of General Staff, Army General Makarov assured in Helsinki on 5 June 2012 that Russia "has no intention of establishing any arctic brigades". Russia's statements are contradictory. The real outcome remains to be seen.

¹⁸⁶ Myasnikov, 2011. See also Pettersen, Trude, 2011. For an update see RLA Novosti, 21 February 2012, "Russia to Field First Arctic Brigade in 2015" [http://en.rian.ru/mlitary_news/20120221/171440711.html]; Pettersen, 2012a.

¹⁸⁵ Yläjoki, 2012.

¹⁸⁷ YLE News, 7 June 2012, "Kenraali Makarovin puhe kokonaisuudessaan" (General Makarov's Full Speech) [http://yle.fi/uutiset/kenraali_makarovin_puhe_kokonaisuudessaan /6169951].

The condition of the Alakurtti airbase, east of Salla, will be improved and a refurbished helicopter regiment will be stationed there. Its equipment will include attack helicopters and armed transport helicopters. Apparently, new helicopters are badly needed.¹⁸⁸ A reserve motorized infantry brigade can be mobilized with equipment from the Alakurtti storage. The above-mentioned helicopter regiment will support this brigade. The depot in Petrozavodsk consists of equipment for one reserve brigade, which performed a mobilization and refresher training exercise in September 2012, thus proving its capability as a military unit not to be dismissed.¹⁸⁹

A powerful early warning radar against strategic missile attack at Lekhtusi village, north of St. Petersburg has been completed. A new air surveillance radar station on Hogland Island is under construction. It will cover the entire air space over southern Finland, the Gulf of Finland and Estonia.

All together the 1st Air Force and Air Defence Command, the air force of the Northern and Baltic Fleets, have more than 200 combat aircraft of different types, more than 100 combat helicopters and a corresponding amount of armed transport helicopters and many special and transport planes of various kinds. Some other air force units use air bases in the area for forward staging purposes.¹⁹⁰

The air force units can universally be quickly mobilized. They can be transferred in a short time from long distances to the desired areas. The Chief of General Staff, Army General Nikolai Makarov, declared in February 2011 that the Russian air force units are in permanent readiness and in full combat order. ¹⁹¹

To clarify dimensions one may observe that the Finnish inventory of about 60 F/A-18 Hornet combat aircraft will even in the future primarily serve as interceptors. The situation will change somewhat, when they obtain air-to-ground capability after completion of their mid-life upgrade.¹⁹²

¹⁸⁸ The efficiency of Russia's air assault units depends heavily on the capability of the helicopters. The present equipment is evidently so worn out that, for example, the 76th Air Assault Division deployed to Georgia as ordinary infantry units. See Leijonhielm, 2012, p. 89.

¹⁸⁹ РИА Новости, 14 September 2012, "Военные учения проходят в Карелии впервые с 90-х годов" [http://ria.ru/defense_safety/20120914/750088693.html]; TV Zvezda, 26 September 2012, "Command and staff mobilization exercises in Karelia - Krl 299" [http://www.youtube.com/watch?feature=player_embedded&v=dWOyWraA]hE#].

¹⁹⁰ IISS, 2011, pp. 188–189.

¹⁹¹ Falichev, 2011.

¹⁹² Ministry of Defence (Finland), 1 March 2012.

The once formidable Swedish Air Force, one of the strongest air forces in Europe during the Cold War, has been allowed to diminish dramatically in capability. When the threat of massive invasion in the Baltic Sea area faded away, the major portion of squadrons were disbanded. This was also the case with most of Sweden's impressive road-base network, vital for wartime combat endurance.

The numbers of both pilots and missiles available in the Swedish Air Force are thought to be modest. "Our capability for air support of ground combat in a war situation is completely inadequate because of lack of suitable weapons", Major General (retd.) Karlis Neretnieks, the former Chief of Operations of the Swedish Defence Forces writes in "Friends in Need", published by the Royal Swedish Academy of Military Sciences in the spring of 2011. ¹⁹³

¹⁹³ Neretnieks, 2011, p. 216. This pessimistic assessment may be only partly true as the Swedish Air Force is equipped with various types of laser-guided Paveway bombs, Maverick missiles and Saab Rb15 anti-ship missiles. The Swedish Air Force has a limited tradition with regard to close air support (CAS), but has rather focused on air interdiction, striking against supply lines, etc., in the rear of the adversary, and air defence. See more Rydell, 2012.

CONCLUSIONS FROM THE FINLAND'S POINT OF VIEW

6.1 Alliances and Proclamations of Solidarity

he major global geopolitical changes and deep economic problems of many countries have also affected Europe and the neighbourhood of Finland. The foundations of the European Union and NATO no longer appear as solid as at the turn of the century.

The most important NATO and European Union member states have greatly reduced their defence spending. A profound difference of threat assessments can be found between old and new NATO member states. The strategic interest of the United States is increasingly focused towards the Asian direction. ¹⁹⁴

Russia is significantly increasing her defence expenditure, and also growing stronger militarily. The smaller countries are uncertain and confused as to how to organize their security.

The North Atlantic Treaty Organization, which was established primarily to protect the security of Western Europe against the Soviet threat, has been largely dismantled. Except for the integrated command and control system, NATO's armed forces have in practice been armed forces of sovereign member states, which have decided independently on how to use their forces. The political goals to guarantee the security of member countries have remained, although with the exception of the United States, the allies' military capability is questionable. The decision taken by the four Visegrad countries in May 2011 speaks for itself.

NATO's Article 5 reads as follows:

The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defence recognized by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually

¹⁹⁴ Clinton, 2011.

and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.

[...]

Any such armed attack and all measures taken as a result thereof shall immediately be reported to the Security Council. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security. 195

NATO's security clause is not unconditional, but the power to decide whether to give aid remains with the member states, who also decide on the quantity and quality of that aid. In addition, Article 5 is also directly coupled to the United Nations and especially to its security council, whose permanent members may theoretically complicate the application of NATO's Article 5. Swedish defence researcher Mike Winnerstig notes:

In the end, NATO's Strategic Concept 2010 as well as NATO's Charter and Article 5, are mainly words on a piece of paper. How these articles will be applied in peacetime becomes a central question in assessing their credibility. 196

NATO's significance as a guarantor of security is, above all, political in nature. The mere achievement of membership in a defence alliance was not "an objective or an accomplishment, but a logical step in a broadly based defence and security reform," Estonia's Defence Minister Mart Laar stated in April 2011. NATO is a security-political haven for new members, and it also imposes duties upon them. This is also the opinion of old member states, who do not consider the threat from Russia to be acute at all.

It was already previously stated that Russia has no respect for the defence capabilities of individual European NATO members. On the other hand, Russia has a strong interest in trying to marginalize NATO as a political factor.

As a member of the European Union, Finland has also approved the Lisbon Treaty's articles 1-42.7:

If a Member State is the victim of armed aggression on its territory, the other Member States shall have towards it an obligation of aid and assistance by all the means in their power, in accordance with Article 51 of the United Nations Charter. This shall not prejudice the specific character of the security and defence policy of certain Member States.

The wording of the EU solidarity clause is noticeably more demanding than NATO's Article 5. The contradiction between the goals of solidarity and their

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¹⁹⁵ North Atlantic Treaty Organization (NATO), 1949.

¹⁹⁶ Winnerstig, 2011, pp. 113–134.

¹⁹⁷ Iivonen, 2011, p. 13.

credible application is also a question of resources. 198 The EU does not have an independent military organisational structure, and NATO member states are committed to fulfil only their own obligations, albeit with a diminished capability as a result of significant military reductions and a lack of political cohesion. NATO has, however, to some extent returned to actual contingency planning.

The EU's ability to react quickly to a serious security-political crisis in its own area or outside it is modest. A great majority, 21 EU member states are also NATO members and nearly 95 percent of all EU citizens live in NATO countries. These states oppose the creation of duplicate military organizations as a useless waste of resources, for the single purpose of meeting the needs of a small minority. Therefore, it is highly unlikely that EU's military-political weight will increase in the future. On the contrary, the EU's weakness in taking responsibility was revealed in an embarrassing way when the Libyan crisis erupted in spring 2011. It should be noted that the development of the EU's military capabilities, according to the Union's Common Security and Defence Policy (CSDP), is exclusively directed towards crisis management operations, not waging war.

Finland and Sweden have committed themselves to helping other EU countries, and Sweden, in addition, to assisting Nordic countries which are not EU member states, i.e. Norway and Iceland. Finland and Sweden themselves will decide upon the quantity and quality of the aid. The unilateral proclamation of solidarity issued by Sweden in 2009, has evoked vivid discussion. It was issued at a time when the country's capabilities to give significant military assistance had already declined sharply in the wake of Sweden's radical defence reform. 199

The key passage of the solidarity proclamation states:

A military conflict in our immediate region in which only one country alone is affected is virtually inconceivable. Sweden will not take a passive stance should another EU member state or Nordic country suffer a disaster or come under attack. We expect these countries to act in the same way if Sweden is similarly affected. Sweden should thus both extend and receive military support.²⁰⁰

¹⁹⁹ Rydell, 2011, pp. 55–57. The full manpower strength of the Swedish Armed Forces will be about 50 000, but only 15 700 in continuous service. See also Agrell, 2010,

¹⁹⁸ Koivula & Forss, 2012, pp. 147–173.

²⁰⁰ Government Offices of Sweden, Ministry of Defence, A Functional Defence, Summary of the Bill Dated March 19, 2011 [http://www.regeringen.se/sb/d/2011/a/137705]; See also Hugemark, 2012, pp. 9-26.

The mention of an ability to give and receive military aid is also a way to make public the secret basic pillar of the country's defence policy during the Cold War; her extensive co-operation with the United States and NATO.²⁰¹

While pondering the mutual solidarity declaration, the different defence solutions of Finland, Sweden and the other Nordic countries have been an obstacle to finding a binding security guarantee between them. The Finnish position has been that separate Nordic security guarantees are not trustworthy as such. Norway and Denmark, which enjoy NATO's security guarantees, cannot unilaterally add to NATO's burden by making promises which eventually may be left to the bigger NATO countries to carry. A very unfavourable situation for Finland would be one in which the Nordic countries would be left alone with their mutual solidarity commitments in a conflict between the great powers, as has sometimes happened in history.²⁰² These political problems would not arise if all Nordic countries were NATO members.

For small militarily non-aligned states like Finland, current changes in her neighbourhood create a condition of deepening insecurity. The Finnish white paper (Finnish Security and Defence Policy 2009) stated that "strong grounds exist for considering Finland's membership of NATO". No security guarantees, whether provided by organizations or states are, however, comprehensive but being left alone also has its risks. In the light of history, agreements have often been interpreted in a way that the interpreter considers beneficial from his own point of view.

The basic security-political positions in the Nordic countries have been static for a long time. Some significant movement can, however, be noted as a result of geopolitical developments and fiscal austerity in Europe and the USA. These provide strong incentives for the Nordic countries to deepen their defence co-operation. It is still premature to consider binding security guarantees in one or another form, but there is a clear understanding that creating common capabilities will serve the Nordic interest.²⁰⁴ Recent examples of military intervention or crisis management suggest that 'voalitions of the willing' are often

Holmström, 2011. Sweden's role as NATO's unofficial 17th member during the Cold War was one of the cornerstones of Swedish defence policy. The co-operation with the United States and NATO assumed the form of quite detailed plans to receive and give help, but due to Sweden's neutrality this had to be kept strictly secret – especially from the Swedish people.

²⁰² Koivula & Forss, 2012, pp. 147–173.

²⁰³ Prime Minister's Office, 2012, p.75. The government white paper released on 21 December 2012 says that Finland preserves the possibility to apply for NATO membership.

This was articulated in an op-ed article in *Helsingin Sanomat* by the Swedish, Finnish and Norwegian Chiefs of Defence in September 2012. See Göranson, Puheloinen and Sunde, 2012. See also STRATFOR, 1 November 2012, *Finland, Sweden: A Step Toward Greater Nordic Security Cooperation*.

a more realistic alternative than full commitment of defence alliances such as NATO. Russia's position to Nordic defence co-operation (NORDEFCO) is negative.²⁰⁵

Closer Finnish co-operation with the United States in the field of defence might bring a substantial change in the current situation, with advantages and disadvantages alike. Thus, Finland has to build her defence relying primarily on her own resources without underestimating the significance of cooperation with other partners, such as the Nordic countries.

6.2 What Kind of Defence Forces does Finland Need?

Finland's national Defence Forces (FDF) exist above all for those unpredictable circumstances when Finland may have to face unacceptable demands, and all other security arrangements have failed.

The guiding factors in deciding the future of the national defence forces are the tasks and demands on the FDF defined by the Finnish Government and Parliament. The Government report of 2009 stated *inter alia* the following with regard to the role of the FDF and military defence:

The Defence Forces, pursuant to their statutory tasks, are employed in the military defence of Finland, in supporting the other authorities as well as in international military crisis management.

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Finland prepares to repel the use of military force, or the threat thereof, against the nation. This highlights the importance of deterrence. The defence capability and readiness are scaled to correspond to the situation at hand.

[...]

In line with the comprehensive approach, it is necessary to estimate whether it is possible to carry out the required tasks with national capabilities alone. Should the capabilities prove inadequate, during normal conditions it is necessary to guarantee the reception of military and other assistance needed in a crisis situation. This can be achieved through close international cooperation or through being allied with others.²⁰⁶

The strength of Finland's peacetime defence forces is among the smallest in Europe, some 30 000. Especially in peacetime, the ground forces are essentially a training organization. Combat forces will have to be mobilized from the reserve.

²⁰⁵ Russia's Chief of General Staff, Army General Nikolai Makarov, Helsinki 5 June 2012. See also Benitez, 2012.

²⁰⁶ Prime Minister's Office, 2009, p. 109. The substance of the wordings in the new government white paper, released on 21 December 2012, remains essentially unchanged. See Valtioneuvoston kanslia, 2012, pp. 96-97.

These comparisons are misleading, incomplete and slanted in which Finland's total wartime strength of 230 000 after full mobilization is compared to the strength of professional armies of countries with many times larger populations, smaller national territorial areas and a completely different geopolitical position.²⁰⁷

In discussions about professional armies, the focus is primarily on ground forces. For Finland a professional army is out of the question. Economic grounds alone rule out that alternative.

This fact was once again established in September 2010 by the so-called Siilasmaa Committee, appointed by the Finnish Ministry of Defence.²⁰⁸ A professional army would be such an expensive solution that its actual size would inevitably be very small. As a new, low-pay profession, the professional soldier would not be an attractive alternative for young Finns to enlist, and the impact on the will of the Finns, which has remained exceptionally high for many decades, to defend their country could be disastrous.²⁰⁹

Participation in international military co-operation is natural. Doing so also serves Finland's own defence capability. Finnish reservists with versatile skills have proved to be useful in various tasks in international operations. Finland's resources are, however, sufficient only for a small contribution to the international crisis management (CM) activities, no matter how much harder we would strive to increase our share in CM operations.

The primary task of the FDF remains the defence of the homeland. However, the cost-effective defence solution has its downside. Combat units, established from the reserve are most vulnerable at the moment of mobilization. Another significant fact is that peacetime readiness is so low that repelling a surprise attack may be difficult.²¹⁰

Ministry of Defence (Finland), 2010, p. 7. According to the source, "General conscription is in our opinion the most cost-effective way to produce defence capability in Finland. The costs of even a very modest professional army would be significantly higher than that of the conscript army." The chairman of the committee, Mr. Risto Siilasmaa is the co-founder of the F-Secure Corporation and present chairman of the board of the Nokia Corporation.

The will to defend their country is traditionally very high among the Finns. About 75 percent of the Finns regularly answer "yes" and about 20 percent "no" to the following question: "If Finland were attacked, should Finns, in your opinion, take up arms to defend themselves in all situations even if the outcome seemed uncertain?" See Ministry of Defence (Finland), The Advisory Board for Defence Information, 2009.

²¹⁰ In the Finnish Ground Forces there are perhaps only about a company of Special Jaegers ready to return fire immediately. The Finnish peacetime units are primarily training units, not fighting units. The readiness of the Finnish Air Force is considered good, but its peacetime inventory of combat missiles is very low, adequate only for training needs and surveillance flights.

²⁰⁷ Commander of the Finnish Defence Forces, 8 February 2012.

It is decisively important that the units mobilized are not eliminated with a few well-targeted strikes, and that they would be capable of fighting territorially dispersed after having survived the first blows. Sufficient endurance is needed and also for buying time to allow for counteractions of friends and allies even after surprise precision strikes.

The Finnish defence community and the FDF contingency planning have to consider the significance of nearby foreign forces in a high state of permanent readiness. Sufficient reserves must be available in order to compensate for initial losses during the mobilization phase and those caused by enemy strikes as well as for personnel rejected due to deteriorated combat capability or for other reasons. If the trained reserve is only equal to the nominal mobilization strength, the precondition for the entire defence capability is rapidly put into question.

A significant part of the reserve will be tied up with different kinds of guarding, protection and auxiliary support duties. The need is already great during the pressuring and threatening phase of the crisis. The call-up and training of the whole annual contingents is necessary in order to satisfy the quantitative demands for reserve units. For example, at the end of the Cold War, there were in Sweden 8 000 sites or locations considered vital for the national defence to be guarded.²¹¹ One can assume that in Finland, there would be thousands of corresponding locations.

The Finnish territorial defence is largely based on the requisition of vehicles and tools from the civilian community in order to fill the needs for mobilized reserve territorial units. There are available at low cost in our country enough all-terrain, four-wheel drive vehicles, snow mobiles, 'monkeys' and other vehicles.

Enemy operations would extend deeply into our territory from the very start with no single, clearly defined front line, and the need for defending units in the vast Finnish territory will be great. An aggressor would have to be met with determined resistance from the very onset of hostilities at important locations anywhere in the country.

The crucial question is how to allocate resources between increasingly expensive state-of-the-art army units and the indispensable local defence system which covers the whole country. A certain modern spearhead is needed to defeat the aggressor. Yet it is questionable how much a possible invader is deterred by a Finnish qualitative military high-tech capability if the quantitative dimension of it is miniscule.

²¹¹Agrell, 2010, p. 44.

CONCLUDING REMARKS

he forceful return of geopolitics in international affairs is a fact. It also has implications in the neighbourhood of Finland. The withdrawal of the Russian forces from the previous Soviet positions in the Warsaw Pact countries and in the Baltic States at the end of the Cold War was the first phase of the change, which coincided with the efforts of the CSCE to build a new cooperative security structure for Europe.

The second phase, Russia's return as a dominant player in the former Soviet sphere began in earnest halfway through the last decade and gained increased momentum during the war in Georgia, the downfall of the so-called Ukrainian orange revolution, and the broader integration of Belarus into the Russian systems. Russia's efforts to establish a Eurasian Union, is a manifestation of her current ambitions and is also an excellent example of the impact of Alexander Dugin's thinking on contemporary Russian policy.

Wilhelm Agrell, a Swedish professor and well-known peace and conflict researcher, wrote in 2010 that the European security architecture suffered a disastrous failure in the war in Georgia:

The war, no matter how insignificant it was, and how well its foreign political effects have been brushed out of sight, simply should never have taken place [...] It was an anomaly, an exception impossible to explain in light of the adopted basic security political framework.

[...]

The war did not fit at all into the picture of the EU's and the eastern border area's mutual and stabilizing relationships [...]. The EU's primary or rather only foreign political capability — soft power — turned out to be merely a stage setting which the Russians punctured unscrupulously.²¹³

By going to war with Georgia in 2008, Russia halted NATO's expansion eastward, President Medvedev pointed out in November 2011:

²¹² STRATFOR, 25 November 2011, "Russia, Belarus: Setting the Stage for the Eurasian Union." See also STRATFOR, 7 June 2011, "Europe: A Shifting Battleground, Part 1."

²¹³Agrell, 2010, p. 235.

The military operations we conducted to force Georgia to peace ... were absolutely necessary. The fact that Russia adopted such a tough line at the time ultimately ensured that the situation is much more peaceful now, in spite of certain difficulties.

We were able to calm down some of our neighbours by showing them how they should behave with regard to Russia and small adjacent states. For some of our partners, including NATO, it was a signal that they must think about the geopolitical stability before making a decision to expand the alliance. I see this as the main lessons of what happened in 2008.²¹⁴

President Putin confirmed in August 2012 that planning for the war started in late 2006. His comment came after high-ranking military officials criticized their former Supreme Commander Medvedev for his hesitant leadership, and for failing to give the final order to execute the plan in time.

The Russian political and military leadership have in recent years adopted a more confrontational language. After Vladimir Putin's return as President in 2012, Russia has more and more adopted positions in line with the traditional FSB attitudes. The dominant players in the West tended to dismiss this mostly as posturing without much substance in deeds.²¹⁵ Russia's invasion of Georgia was simply forgotten.²¹⁶ This western perception may, however, be changing as the first cracks in the friendly facade among Russia's closest western partners begin to appear.²¹⁷

²¹⁴ President of Russia, 2011. Russia's NATO Ambassador Dmitry Rogozin was more explicit, without active Russian operations Georgia and Ukraine would have become NATO members. See *PИА Новости*, "Медведев: бездействие РФ в 2008 г могло бы привести к расширению HATO", November 21, 2011, [http://ria.ru/defence_safety/ 20111121/494106971.html]. See also Giles, 2012a. Keir Giles argues convincingly that the Russian view of events related to the war in Georgia is not credible. "Russia and the world woke up to war on the morning of 8 August, but close study of events leading up to that point provides a number of indicators that suggest additional Russian troops were moving into South Ossetia significantly earlier - crucially, without necessarily having explicit authority to do so from the supreme command." In addition, he raises the important question of risks related to deficient command and control systems in Russia, which may lead to dangerous and provocative activity at a time of tension by individual units, as was the case in Georgia.

²¹⁵ Germany's Foreign Minister Guido Westerwelle's comments to Russia's threats to react militarily to NATO's missile defence plans in Europe are revealing: "In any case, I see not only the possibility for agreement, but the necessity for agreement. ... We will not ensure our own security against Russia, but together with Russia in Europe." See Bidder, 2011. Another example is provided by Army General Makarov's speech in Helsinki on 5 June 2012 and President Putin's confirmation that the Chief of the General Staff voiced Russia's position. Finnish Foreign Minister Erkki Tuomioja held that the General had spoken in a personal capacity.

²¹⁶ Seldom has a fine book carried such a sadly misplaced title as that of the late Ronald D. Asmus, A Little War that Shook the World – Georgia, Russia and the Future of the West, Palgrave Macmillan, 2010.

Neukirch, 2012. Dr. Andreas Schockenhoff, Chancellor Merkel's commissioner for German-Russian co-operation has strongly criticized the leadership style of President Vladimir Putin and charged that "state power (in Russia) views politically active citizens as

The U.S. think-tank STRATFOR commented already in December 2011 as follows:

For Russia, the fundamental issue at hand is not the BMD system itself, but the U.S. military presence the system would bring with it. U.S. BMD plans are focused on Central Europe, which abuts Russia's former Soviet periphery. Moscow can't help but feel threatened by the U.S. military commitment to the region that the system represents.²²¹

In its military doctrine, Russia considers NATO a danger. The authors of the doctrine, however, regarded NATO still a threat to Russia, even a serious threat.222 A disunited NATO, on the other hand, considers Russia a partner. The experienced Swedish Russia expert Jan Leijonhielm writes in *Friends in Need*:

opponents rather than partners." Well-known Russian scientist, Dr Igor Sutyagin, who spent 11 years in prison and labour camps on dubious charges before he was released in the swap related to the exposed Russian spy ring in the USA in 2010, cited a British politician as follows: "If you want to speak about Russia, speak about it as it is, not as you want it to be." See Sutyagin, 2012.

²¹⁸ Frolov, 2011. Ambassador Rogozin points out that the Treaty on Conventional Forces in Europe (CFE, 1990) and the adapted CFE Treaty (1999) were agreed upon at a time when Russia was weak and that they are no longer acceptable. The CFE negotiations took place in parallel with the confidence-building talks leading up to the Paris Charter and the Istanbul Document.

²¹⁹ Kimball, 2011. See also *RIA Novosti*, 25 November 2011, "UK Halts Military Data Sharing with Russia" [http://en.rian.ru/world/20111125/169036481.html].

²²⁰ Isachenkov, 2011. "We won't allow them to treat us like fools," he [Mr. Rogozin] said, and continued: "Nuclear deterrent forces aren't a joke." Mr. Rogozin was soon afterwards appointed Deputy Prime Minister. His main responsibilities are in the domain of arms procurement.

²²¹ STRATFOR, 8 December 2011, "Central Europe Watches as Washington, Moscow Clash over BMD" [http://www.stratfor.com/memberships/205624/geopolitical_diary/ 20111207 -central-europe-watches-washington-moscow-spar-over-bmd]. ²²² Felgenhauer, 2010.

For small states in Russia's neighbourhood the military doctrine is by no means a calming document, given the earlier-mentioned Russian law stipulating a right for Moscow to intervene wherever and however in defence of Russian citizens abroad.

Investment in considerably higher readiness, great mobility and attempts to increase air assault capabilities [...] matches ill with the development of Russian doctrine, which stresses defensive capability. A possible future Chinese threat, for example would probably not require any major naval landing capability.²²³

In Western Europe, the threat of war is considered an extremely outdated thought. It has resulted in exceptionally large reductions in the armed forces of NATO and of other Western countries, and the emphasis of tasks has shifted from national defence to international crisis management. At the same time their military operational readiness has decreased drastically.

Russia takes advantage of this situation, and acts in her own way. In developing the capabilities of her armed forces she aims to create units of high readiness which are able to achieve operational results also in the western direction by surprise strikes directly from their peacetime deployments. Reinforcements would be brought in and possible occupation forces mobilized from the reserve only after the operation has begun.

The "new" NATO member states gained a political victory when the Alliance finally agreed to work on contingency plans for the defence of the Baltic States. The geostrategic position of these countries is exceptionally unfavourable. A capacity to repel invasion from the very outset of hostilities may therefore not be deemed possible. Only scarce open information about these plans is available, but it appears that the starting point for the planning is retaking of lost ground. ²²⁴

If Russia were forced to consolidate territorial gains, obtained with conventional means, she might be tempted to use nuclear threat. Open discussions of "de-escalation" of conflicts by the use of nuclear weapons, the simulated use of tactical nuclear weapons at the end of large military exercises, such as Zapad-2009 and Vostok-2010, and the deployment of dual-capable Iskander missiles not far from the Estonian border, support this view. 225 It will be in-

²²⁴ Neretnieks, 2012, pp. 199-204. According to Karlis Neretnieks, "It's all about retake." This description of the allied contingency planning for the Baltic States was communicated by a Swedish defence researcher.

²²³ Leijonhielm, 2012, p. 98 and 106.

²²⁵ In addition to Luga, Iskander missile deployment to both Kaliningrad and Belarus is contemplated. See Liakhovich, 2012.

teresting to see how the planned Russian-Belarusian Zapad-2013 exercise will be executed in September 2013, announced as a CSTO exercise. 226

A general perception is that there is no immediate threat in view now.²²⁷ However, no one can predict reliably what the world will look like ten or twenty years from now, the timeframe of today's strategic decision-making. Finland's influence on world affairs is modest, at best. Capabilities, not intentions are significant.

The defence can be considered credible, when the aggressor realizes that defeating it will be achieved only at an unacceptably high cost. The defender himself has to be confident of his capabilities. In broader terms, national defence requires the comprehensive military and societal capability to endure. The importance of good strategic early warning should not be underestimated.

A sufficiently large military reserve is a signal of the people's will to defend the homeland. Above all, it also indicates that the defence cannot be paralyzed by a surprise attack or by threat thereof, and that resistance will continue even after enemy invasion. The preventive value of a large reserve is significant.

²²⁶ РИА Новости, 28 December 2012, "Российско-белорусские стратегические учения пройдут в 2013 году" [http://ria.ru/defense_safety/20121224/915972564.html]. President Putin: "It is important to enhance the interaction with allies, particularly those in the CSTO. Such tasks will be solved in the framework of the planned Russian-Belarusian military exercises West-2013."

²²⁷ As this report deals primarily with military capability developments, the authors leave it to others, mainly the decision-makers, to assess the threat.

ANNEX 1

Russia's Military Expenditure

In September 2012 the Russian government submitted to parliament the draft budget for the years 2013 to 2015. The Russian State Duma approved it for the next three years at first reading at the end of October. The budget proposal subsequently passed the parliamentary process and was signed into law by the President on 5 December 2012. 229

Overall, the federal budget demonstrates the government's commitment to responsible macroeconomic policy. The Russian government is prepared to deal with the probable drop in oil revenues, which constitute almost half of the federal government income.

Russia's finance ministry unveiled in July 2012 the direction of 2013–2015 federal state budgets, presenting a rise in defence spending by 25.8 percent for 2013 alone. The total state budget for 2013 is 12 745 billion rubles (ϵ 316 billion; 40.3 RUR = ϵ 1). The document formed the basis for the 2013 budget presented by Prime Minister Dmitri Medvedev later in 2012. Interesting to note is that the budget plan stipulated an oil price of \$92 for a barrel in 2013.

The budget breakdown provides insight on the priorities of the Putin administration. More than one third of the federal government spending is assigned to defence, security and police. According to the analysis of Gaidar Institute, a leading Russian think-tank, the military spending is the only part of the budget growing in real terms in 2013–2015 with the total three-year increase of 37%. In contrast, the health care spending will be cut by 50% from the current mediocre level. The details on the defence budget are not disclosed: 50% of spending is secret. Presumably, most of the money will be spent on the rearmament of the Russian military force. ²³¹

"Targeted 'national defence' spending as a percentage of GDP will amount to 3.2 percent in 2013, 3.4 percent in 2014 and 3.7 percent in 2015", Defence Committee chairman Vladimir Komoedov was quoted as saying in the committee's conclusion on the draft budget for 2013-2015. The spending proposals provide financing to "re-equip units with new weapon systems, military

²²⁸ Committee for Russian Economic Freedom, 2012.

²²⁹ President of Russia, 2012b.

²³⁰ Министерство финансов Российской Федерации (Ministry of Finance, Russian Federation), 2012; Nilsen, 2012.

²³¹ Committee for Russian Economic Freedom, 2012.

and special equipment and provide housing and social safeguards for service members" among other issues, Komoedov said.²³²

The share of GDP relating to the total military expenditure is shown in the table.

Year	Total military ex- penditure (billion roubles)	Total military expenditure (billion euros)	Growth (%)	Total military expenditure (as % GDP)
2012	2 798.249	46.2	+ 12.3 %	4.57 %
2013	3 052.723	58.2	+ 14.8 %	4.59 %
2014	3 389.244	65.8	+ 11.7 %	4.58 %
2015	3 973.042	71.0	+ 12.3 %	4.79 %

MILITARY EXPENDITURE IN THE FEDERAL BUDGET FOR 2012–2015²³³ (The total military expenditure includes spending for 'national defence, other military expenditure, military pensions, MOD and paramilitary forces')

The share concerning other security and military services (so called "power ministries", siloviki, Russian: *cuποευκύ*) is estimated to exceed 1%. Although salaries for members of the Russian armed forces are rising fast, it is not visible in the budget.²³⁴ The current rearmament programme (total amount of 20 000 billion roubles, approximately 500 billion euros) extends to 2020. It will be aimed more at purchasing of new armaments instead of modernizing old.

In addition, Prime Minister Vladimir Putin announced already in October 2011, that the government is going to use 3000 billion roubles (around 72 billion euros) for upgrading defence industry, a necessary step for fulfilling the ongoing purchasing plans.²³⁵

The Defence Ministry coordinates also the weapons procurement of all other "power ministries". Deputy Prime Minister Dmitry Rogozin announced a detailed breakdown of the planned annual rearmament expenditure at the end of 2012 as follows: "The state defence order will reach about 1.9 trillion roubles in 2013, about 2.2 trillion in 2014 and 2.8 trillion in 2015", and is expected to stay at that level until the end of the decade. 237

²³² Fedorenko, 2012.

²³³ Cooper, 2012.

²³⁴ Arkhipov, 2011.

²³⁵ Rosbalt, 6 October 2011 [http://www.rosbalt.ru/business/2011/10/06/898103.html].

²³⁶ Fedorenko 2012.

²³⁷ RIA Novosti, 27 December 2012, Russia to Triple State Defense Order by 2015, [http://en.rian.ru/military_news/20121227/178443375.html].

ANNEX 2

The Development of the Russian Armed Forces

In October 2008, Russian Defence Minister Anatoly Serdyukov announced the launch of a new stage of military reform, aimed at transitioning the Russian Armed Forces to a new look. This rapid and intensive military reform turned out to be the most radical transformation of the armed forces since the Second World War. From the very beginning the planned reform met with strong opposition from conservative circles of the defence community, eventually leading to what could almost be called dishonourable discharge of both the defence minister and the chief of general staff in November 2012. Although implementation of the reform is well under way, it is by no means completed. Ambitions to create a pure and radically smaller professional army than the former Soviet-style army, equipped with state-of-the-art weapons, were thwarted. The final outcome remains to be seen, but is likely to be a mix of both concepts.

The Goals and Objectives of the Russian Armed Forces' Reform

The purpose of the reforms is to create mobile and well-trained armed forces equipped with modern equipment and weapons. Priorities are as follows:

- Re-deployment of all formations and units for permanent combat readiness, 100% staffing for a state of war,
- Re-equipment of the Armed Forces with modern armaments, military and special equipment to meet modern requirements,
- Revision of program statutory documents for instruction, training and conduct of military operations of the Armed Forces, as well as planning and guidance documents to ensure the vital functions of troops and forces,
- Training of new officers and non-commissioned officers, compiling of new training programs, creation of a modern network of military schools,
- Ensuring decent military pay, fulfilment of permanent and service housing requirements and resolution of complex social security problems.²³⁸

The President of Russian Federation Dmitri Medvedev appeared in March 2010 at the meeting of the Collegium of the Ministry of Defence. At that meeting the ten year rearmament program (2011–2020) for the Russian Armed Forces was finally accepted. The Russian Government was given the

²³⁸ Barabanov, Makienko & Pukhov, 2012.

task of renewing the weaponry of the Armed Forces by an average of 9-11% per year, so that by 2020 the modern equipment would make up 70% of the total. At the same time they were also to improve the education of officers and other military personnel and to raise the combat readiness of troops.²³⁹

One main objective of the rearmament program, signed by the President on 31 December, 2010, is to secure maintenance and further development of Russia's strategic nuclear weapons. About 10% of all the funds are concentrated on the development and acquisition of land-based nuclear weapons. These include both the modernization of existing systems and the purchase of new ones. ²⁴⁰ Efforts are also being made to improve the nuclear strike capability. ²⁴¹

Another priority is strategic space defence, especially the development of an advance early warning system. By 2018 the modernization of the present system should be completed and new facilities constructed in all threatened directions. The program also includes different types of satellites, and other space defence systems.²⁴²

The Voronezh-M anti-missile radar at Lekhtusi, north-east of St. Petersburg, became the first radar station of its kind in the country. There are three other new generation radar stations in other directions of Russia. At the end of 2011, Russia started to operate another new missile warning radar Voronezh-DM. This station is located in the Kaliningrad enclave. These stations can monitor the Northern sector including space and missile launches in Sweden and Norway. They are also monitoring aircraft flying in the area of their responsibility.²⁴³

Russia is also modernising her airborne early warning and control aircraft, A-50 Mainstay (AEW&C).²⁴⁴ There have already been doubts about the realization of the latest equipment program, since the three previous programs were not completed. The former program (GPV-2015) for 2007–2015 was far behind the established schedule when it was abrogated in 2010.²⁴⁵

There are serious doubts that Russian defence industry will be able to fulfil its goals. Co-operation today with several western manufacturers is one indica-

 $^{^{239}}$ Krasnaya Zvezda, 18 March 2011, "Линия роста" (The Line of the Growth) [http://old.redstar.ru/2011/03/18_03/1_01.html].

²⁴⁰ Falichev, Oleg, 2011a, p. 1.

²⁴¹ Sergeev & Naumov, 2011.

²⁴² Falichev, Oleg, 2011a, p. 1.

²⁴³ Mikhailov 2012.

²⁴⁴ FlightGlobal/Airspace, 14 August 2012, "The Beriev A-50 Airborne Early Warning and Control Platform" [http://www.flightglobal.com/airspace/media/russian_air_force_centenary/the-beriev-a-50-airborne-early-warning-and-96716.aspx].
²⁴⁵ Falichev, Oleg, 2011a, p. 1.

tion. On the other hand, it should be noted that when Russia's defence industry finally received the promised entire budgetary funds, it was able to carry out about 70% of the State's orders.²⁴⁶

Now it seems that the new leadership team at the MOD has decided to stop using the threat of importing armaments from abroad to get Russian defence industry to improve the quality of its products. For a couple of years, this seemed to be a favourite tool used by former Defence Minister Serdyukov, especially in his bid to improve the quality of Russian tanks and armoured vehicles. Just in the beginning of 2013 there have been some indications that the MOD has turned away from imports and will return to the autarkic model of military procurement that has been more traditional for the Russian armed services. 247

Russia's new Army Brigades

The reform of the Russian army includes forming three categories of brigades, designed for different tasks.²⁴⁸ The first category of brigades, heavy brigades, will be the main army unit and will maintain permanent readiness status. Such a brigade consists of tracked, main battle tanks (for example T-90) and BMP (amphibious tracked infantry fighting vehicles). The brigade's organic artillery is mainly armoured with self propelled guns.

The second category of brigades, medium brigades, will be used as rapidresponse unit. The combat vehicles of these medium brigades are mainly wheeled-chassis armour (BTR). The brigade's artillery is towed or self propelled on wheels.

The third and final category of brigades, light brigades, will be highly mobile units and use light armoured vehicles are characterized by high protective full field equipment of individual combatants.

²⁴⁶ Gorenburg, 2011.

²⁴⁷ Gorenburg, 2013a.

²⁴⁸ Boltenkov, Gayday, Karnaukhov, Lavrov & Tseluiko, 2011, p. 30.

PERMANENT REA	DINESS BRIGADES	OF THE F	RUSSIAN	ARMED F	ORCES	
MILITARY DISTRICT		WEST	SOUTH	CENTRE	EAST	TOTA
ARMY HQ		2	2	2	4	10
TANK BRIGADE		2		1	1	4
MOTOR RIFLE BRIGADE		8	8	7	8	31
MOT. RIFL.BR OUT OF RUSS	IA					4
LIGHT BRIGADE			2			2
MACHINE GUN & ARTILLERY DIVISION					1	1
PROTECT. BRIGADE					1	1
SPECIAL FORCE BRIGADE/SPETSNAZ/RECCE		2	2	1	2	7
ARTILLERY MISSILE BRIGADE		4	1	2	2	9
ARTILLERY BRIGADE		4	2	1	3	10
HEAVY MULTIPLE ROCKET LAUNCHER BRIGADE		1	1	1	1	4
AIR ASSAULT BRIGADE			1		2	3
AIRBORNE DIVISION		3	1			4
AIRBORNE BRIGADE				1		1
AIRBORNE REGIMENT		1				1
AIR DEFENCE BRIGADE		5	2	1	3	11
ENGINEER BRIGADE		2				2
MARINE INFANTRY BRIGADE		2	2			4
MARINE INFANTRY DIVISION					1	1
COASTAL MISSILE BRIGADE		2	1		1	4
BRIGADES (EQUIVALENT) T	OTAL	36	23	15	26	104

PERMANENT READINESS BRIGADES OF THE RUSSIAN ARMED FORCES²⁴⁹ (Note: a) Signal, electronic warfare, logistics, ABC, naval, air force, air-space defence and some other brigade-level units not included; b) The small distinctions between the above table and the list of the permanent readiness formations in The Western Military District (Annex 3) are due to different sources).

In all military districts, from Kamchatka to Kaliningrad, groups of armed formations capable of offensive strike operations, have been built. In these formations, combat brigades and airborne divisions of permanent readiness are playing the most significant role. The troop skills in combat have been tested in many large field exercises. The Chief of General Staff, Army General Nikolai Makarov mentioned on 17 November, 2011 that all these formations are fully operational and ready to meet their combat tasks in one hour. According to our estimates in reality each permanent readiness brigade may have only one battalion battle group in high daily readiness.

The Commander-in-Chief of the Ground Forces, Colonel-General Vladimir Chirkin has said that Russia will also add 10 reconnaissance, 14 army aviation and two air defence brigades by 2020 without increasing the overall number of personnel in the Armed Forces.

²⁴⁹ Warfare.be, "Russia's New Army" [http://www.cast.ru, http://warfare.be].

²⁵⁰ McDermott, 2011c. The substance of that specific claim became the topic of heated discussion. Few observers accept it as such.

In line with the current military reform, the Russian Armed Forces have been reduced to 1 million personnel and reorganized from a four-tier (military district - army - division - regiment) to a more flexible and battle-ready three-tier structure (military district - operational command - brigade). At present, there are more than 100 brigades deployed in four military districts. (See after the table on previous page).²⁵¹

The military districts have formed their own separate reconnaissance units. The ground forces brigades of constant readiness will be capable to operate independently aside mobile battle groups and other brigades. With the aid of these intelligence units, the commanders have a clear picture of what is happening from 25–100 kilometres beyond the front lines. In the near future this capacity can be extended even to 5000 kilometres by the aid of UAV's and other modern means. Each military district has its own separate reconnaissance brigade and each motorized and armour brigade has its own reconnaissance battalion. ²⁵²

At least three military districts have a new air assault brigade at their disposal. There will be total six of these brigades. To improve the mobility of these brigades each of them will have a helicopter regiment of 60 helicopters (40 Mi-8s and 20 Mi-24s). These brigades will serve in the role of strategic reserve for the Joint Strategic Commands (Military Districts) as the airborne divisions are subordinated the Supreme Command.²⁵³

Each Military District will also have an artillery missile brigade with dual capable Iskander-M missiles. The first brigade of this kind is already operational at Luga base, near St. Petersburg. The range of the missile is officially below 500 kilometres, but it has potential to fly 700 kilometres in its present configuration and 1000 kilometres in a model employing new, more efficient fuel. Each brigade has twelve launchers of two missiles. The new structure of the Russian Ground Forces is said to be alike its western counterparts. The new structure is expected to improve the effectiveness of operations, to coordinate and shorten the chain of command.²⁵⁴

The brigade organisation also seems noticeably more flexible and more suitable for local conflicts, since the divisions were too large and cumbersome, and regiments on the other hand, lacked weapons and equipment necessary for carrying out independent operations. The ground force brigades will be

²⁵³ Gavrilov, 2009.

²⁵¹ Pitalev, 2012.

²⁵² Ibid.

²⁵⁴ Ibid.

used as constantly ready units which will be capable to operate independently, along with highly mobile units under one command.²⁵⁵

The tendency in reorganization is to strengthen important directions like Northwest, South and Far East, on expenses of other areas.²⁵⁶

Ground Forces play a primary role in defending a large area and long borders of Russia and securing country's integrity. It has a decisive role also in present circumstances in defeating enemy and in gaining important goals and objectives.²⁵⁷

Reforming the armament and other equipment

The Army

Colonel-General Aleksandr Postnikov, the former Commander-in-Chief of the Russian Ground Forces has stated three problematic areas and six priorities as follows:

The problems:

- Lack of modern equipment,
- Uneven capability and performance of older equipment, ineffective intelligence, C³, navigation, target acquisition, camouflage, forces protection, and firepower ("gun power"),
- Wide range of equipment models further aggravate maintenance and repair.

The six priorities:

- The creation of a common, automated intelligence and information system, C³I, capable of serving through the chain of command agency on all leadership levels (ESU TZ leadership organization),
- Equipping of troops with different kinds of precision long-distance and short-range weapons,

²⁵⁵ ARMY Recognition.com, 18 January 2012, "Russia Allocates \$ 160 Million for Development of Three Types of Unmanned Aerial Vehicle (UAV)" [http://www. armyrecogntion.com/january_2012_army_military_defense_industry_news/russia_allocates_160_million_to_development_of_three_types_of_unmanned_aerial_vehicles_uav_1 801122.html]; Russian Military Forum, "UAVs in the Russian Forces" [http://russiadefence.eng-lish-board.net/t161-uavs-in-the-russian-forces-news].

Kipp, 2011; GlobalSecurity.org, *Baltic Fleet* [http://www.globalsecurity.org/military/world/russia/mf-baltic.htm].

²⁵⁷ Tikhonov, 2010.

- Increasing the effectiveness of the equipment for a solitary fighter with the aid of different intelligence elements,
- Introducing remote guided and piloted recognition and weapon systems i.e. robots, drones, sensors, UAV's,
- Improving the capacity of individual soldier by net centric systems and utilising nanotechnology in micro-miniaturizing,
- Improving protection of individual soldiers and vehicles.²⁵⁸

The fundamental change in 2010 was to move from repairing and modernizing the equipment to production of new and modern weapon systems. Top on the purchase list among other things are:

- Ground Forces anti-aircraft brigades` automatic C³I system (ASU),
- Further acquisition of missile and an artillery systems for Ground Forces, such as tactical missiles Iskander-M, heavy multiple rocket launcher Tornado-G, self-propelled artillery systems Hosta and Nona-SVK and anti-tank missile system Khrysantema-S,
- Modernized S-300V4, Buk-M2 and Buk-M3 SAMs, Tor-M2U(M) short range AA-system, shoulder launched Igla-S and Verta close range AA-missiles,
- New T-90 MBT, BTR-82A ACV and considerable amount of foreign and domestic produced trucks.²⁵⁹

In 2012 the Russian Ministry of Defence bought armament and equipment worth of \$ 23.1 billion (about € 18 billion). By 2020, Russia's troops are to receive approximately 2,000 new artillery systems, 2,300 tanks, and 17,000 vehicles. Four hundred (400) intercontinental ballistic missiles will be purchased over the coming decade. ²⁶⁰

In Russia artillery is traditionally called "God of the War" (*Bog voinyi*). The development of different types of Russian artillery is still going on. The accuracy, rate and range of fire are particular objects for development.

Russia's artillery currently deploys the 122-mm Grad, 220-mm Uragan, and 300-mm Smerch rocket systems and the improved Tornado-S, Tornado-G, and Uragan 1-M are currently undergoing state acceptance trials. The army is in the process of receiving up to 30 Tornado-G systems this year, replacing the BM-21 Grad.

The Russian Army is gradually moving toward a new level of capability for deploying precision use of long-range rocket artillery. For instance Russia is

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²⁵⁸ Ibid.

²⁵⁹ Tikhonov, 2011.

²⁶⁰ Kashin 2012.

now developing new long-range multiple launch rocket systems (MLRS) with improved guidance that could allow them to strike targets up to 200 km away. That means a new generation of MLRS with a range of 200 km. The new Tornado-S rocket launcher will have a longer range and increased effectiveness, thanks to greater accuracy and the use of new warhead payloads and a reduced launch readiness time of just three minutes.²⁶¹

The Russian Army is planning to begin modernize its armoured and mechanized forces beginning in 2015, fielding a new family of vehicles comprising a new main battle tank, armoured infantry fighting vehicles, and various support platforms. The main battle tank (MBT) will be based on the new model Armata, the prototype is scheduled to enter field trials in 2013, about 10 months ahead of schedule. According to the First Deputy Defence Minister Alexander Sukhorukov, the new tank is under development at Uralvagonzavod in Omsk. The first deliveries of the tank to the Armed Forces are scheduled for 2015. ²⁶²

According to preliminary reports, the new tank designated T-99 will be less radical and ambitious than the failed 'Object 195' or T-95. It will weigh less, therefore, become more agile and will be more affordable, compared to its more ambitious predecessors. ²⁶³The Armata platform is intended to be the basis for a number of other vehicles too, including a main battle tank, a heavy infantry fighting vehicle, a combat engineering vehicle, an armoured recovery vehicle, a heavy armoured personnel carrier, a tank support combat vehicle and several types of self-propelled fighting vehicles. ²⁶⁴

It should be remembered that the Russians are building their fighting forces not only against NATO, but more importantly, to protect their long southern borders with radical Islamic countries that may be gathering military power, and the growing dominance of China in the east. Armoured and mechanized forces are key to maintaining military superiority or parity against such threats. The level of sophistication in meeting those threats is not as demanding as meeting the advanced technology fielded by US and NATO forces.²⁶⁵

The Air Force

The Russian Air Force is currently undergoing a period of significant restructuring, both in terms of general organization as well air base and unit structure. The organization will be changed from previous division—regiment structure.

²⁶¹ Vyatkin & Lysichin, 2012.

²⁶² Eshel, 2012.

²⁶³ Ibid.

²⁶⁴ Gudkov, 2012.

²⁶⁵ Eshel, 2012.

ture to air base organization. There will be about 50 bases of three different categories.²⁶⁶

- The first category air base includes 5–10 squadrons. The main bulk of bases are of this category. They will be located in directions, where army brigades most probably need air support and cover.
- The second and third category bases are less well equipped.

Not long ago, the Russian Air Force was in quite poor shape. Almost all of its aircraft were 20–25 years old, outdated, and in poor condition. It's therefore not surprising that the State Armament Program made procurement of new aircraft a priority, with a total investment of four trillion roubles ($\sim 6 \, 100 \, b \, l$ lion) in that sector alone. ²⁶⁷

According to the new ten year procurement programme the Russian Air Force will purchase over 1 500 new aircraft and significantly increase the number of high-precision weapons in its arsenal by 2020. Overall, Air Force is planning to acquire and modernize about 2 000 aircraft and helicopters by 2020, including more than 1 500 new aircraft and about 400 modernized ones. The number of all-weather aircraft, capable of carrying out day and night missions would increase almost 80 percent, and the share of UAV's would constitute about 30 percent of the total by 2020. Every Joint Strategic Command (Military District) can enable its own air support (air transport and close air support) exploiting its own frontal air force and helicopter brigade. Even each motorized rifle brigade and tank brigade will have air support from its helicopter unit (helicopter squadron). 269

Since 1992 until in 2010 Russian Air Force has not received new aircraft in significant numbers. The new aircraft received earlier were not genuine serial production products but came from smaller prototype series. In 2010 the first fifth generation T-50 PAK FA stealth fighter flew its maiden flight. It is due to enter service in the middle of this decade.²⁷⁰

Some of the largest investments in the Russian Air Force are earmarked for military transport aircraft. Contracts have been signed to acquire 20 Antonov An-124-100 Ruslan (NATO: Condor) heavy strategic transport aircraft starting in 2015, 39 Ilyushin Il-476 (aka Il-76MD-90A) heavy airlifters starting in 2014, 11 Antonov An-140 light transport planes (two of them have already been delivered), and up to 30 Czech made Let L-410UVP commuters (7 of them have already been delivered).

²⁶⁷ Gorenburg, 2012.

²⁶⁶ Gavrilov, 2009.

²⁶⁸ Kiselev, 2010.

²⁶⁹ Litovkin, 2010.

²⁷⁰ Barabanov, 2011.

In addition, there are plans to purchase up to 50 Il-214 MTA medium-lift military transport aircraft, which are expected to be ready for production by 2016, and up to 20 Antonov An-148 passenger transport planes. Finally, 41 Il-76s and 20 An-124s will undergo modernization. Some Russian experts mentioned the possibility of a tender for up to 100 Ilyushin Il-112 light transport planes.²⁷¹

The air force is also planning to buy up to 30 refuelling planes that will be based on the Il-476 transport plane. There are also plans to buy an unspecified number of A-100 Beriev AWACS planes, which are currently under development, and four Tupolev Tu-204 reconnaissance planes. These will serve in conjunction with 12 modernized A-50 Beriev (NATO: Mainstay) AWACS planes and 10 modernized MiG-25RB reconnaissance planes. The Russian Air Force has altogether around 20 A-50 Mainstay AWACS planes, based on Ilyushin Il-76 transport.²⁷²

In terms of strike aircraft, the air force is placing a big bet on the Sukhoi T-50 PAK FA fifth generation strike fighter. Sixty of these planes are expected to be procured starting in 2016 (originally planned for 2014). While four T-50 prototypes are already being tested, there are indications that new engines and advanced electronic systems (and especially its avionics) are not yet ready. This may lead to another round of delays in serial production.²⁷³

While waiting for the Sukhoi T-50 PAK FA fighters, the air force is receiving new Su-35S "generation 4++" strike aircraft, 48 of which were ordered in 2009 for delivery through 2015. Four have been received to date. According to estimates in 2011 the Russian Defence Ministry received at least 28 jets (two Sukhoi Su-35S multirole fighters, six Su-34 fighter-bombers, eight Su-27SM3 4+ generation fighters, eight Yak-130 trainers, one Tupolev Tu-214ON (Open Skies surveillance plane)²⁷⁴, two Tu-154Ms and one Antonov An-140-100 transport air craft) and more than 100 helicopters (15 Mil Mi-28Ns, 10 Kamov Ka-52s, two Mil Mi-35Ms, one Mi-26, six Ansat-U helicopters, six Ka-226s, more than 60 Mi-8s of different modifications).²⁷⁵

It is possible that an additional 48 or 72 Su-35s may be ordered once the current order is completed. The air force is also planned to receive 30 Su-30SM fighters by 2015, with an option for an additional 30 planes. The first two of these have been received. The Russian military has also received four Sukhoi Su-30M2s and twelve Su-27SM3s since 2010. Older planes are being modern-

²⁷¹ Gorenburg, 2012.

²⁷² Ibid.

²⁷³ Ibid.

²⁷⁴ Verba, 2012

²⁷⁵ RUSSIAN AVIATION, 25 March 2011, "Russian Air Force Upgrade Review" [http://www.ruaviation.com/docs/4/2011/3/25/27/print/].

ized, including a total of 120 Sukhoi Su-25 (NATO: Frogfoot) close air support aircraft (50 already upgraded) and 120 Mikoyan MiG-31 (Foxhound) interceptor aircraft (at least 25 to be completed by the end of 2012).²⁷⁶

In addition to the fighters, the air force has ordered 129 Sukhoi Su-34 fighter-bombers to be delivered by 2020, with an option for at least another 18. Fifteen of these planes have been delivered. In the meantime, the air force is continuing to modernize its existing stock of Su-24s, with 50 already modernized and 50 to be upgraded before 2020. In terms of training aircraft, 18 Yak-130s have been delivered as of October 2012, with another 49 on order and an option for another 10. The air force is also purchasing twelve Su-25UBM two-seaters that will likely be used for training. ²⁷⁷

By comparison, long-range aviation will get very little over the next decade. There are no plans to complete the two or three remaining Tupolev Tu-160 (NATO: Blackjack) supersonic strategic bomber, carrying cruise missiles. Production of these strategic bombers dates back to Soviet times. Discussions about designs for a new long range bomber are continuing. In any case, production of new long range bombers will not start until after 2020. The only contracts in this sector are for modernization, including 30 Tupolev Tu-22M3 (NATO: Backfire) bombers and cruise missile carriers, 14-16 Tu-160 strategic bombers, and up to 30 Tu-95MS (NATO: Bear) strategic bombers.²⁷⁸

In terms of rotary-wing aircraft, there are contracts in place for 167 Mi-28N (45 already delivered), 180 Kamov Ka-52, and 49 Mil Mi-35M (10 already delivered) attack helicopters. Transport helicopter orders include 38 Mi-26 heavy lift helicopters. Six have already been delivered and another 22 may be ordered in the future. Up to 500 Mi-8s of various types will be purchased. These are currently being produced at a rate of 50 per year. There are also contracts in place for 36 Ka-226 (6 already delivered) and 32 Mil Ansat-U (16 delivered) light transport helicopters. Additional contracts for 38 Ansat-U and up to 100 Kamov Ka-62 helicopters may be placed in the near term.²⁷⁹

During the year 2012 the Russian Air Force appears to have turned a corner on procurement, having received 40 new airplanes and 127 new helicopters. For the first time, the entire aviation procurement plan appears to have been fulfilled. The winged aircraft include now 10 Su-34s, 6 Su-35s, 2 Su-30SMs, and over 20 Yak-130s. There's no detailed breakdown regarding helicopters, though the bulk are probably Mi-28N and Ka-52s. This is an improvement on

²⁷⁸ Ibid.

²⁷⁶ Gorenburg, 2012.

²⁷⁷ Ibid.

²⁷⁹ Gorenburg, 2012.

2011, when 31 fixed-wing aircraft and over 50 helicopters were procured. Given that in 2010, the numbers were 23 and 37, respectively.²⁸⁰

It will probably still be tricky for the aircraft industry to reach the stated State Armament Program goal of delivering 1 120 helicopters and 600 fixed-wing aircraft by 2020, but reaching 70 percent of that target by 2020 appears doable, with the rest arriving by 2025 at the latest.²⁸¹

The Aerospace Defence (Vozdushno-Kosmicheskaya Oborona – VKO)

On 1 December, 2011 the Aerospace Defence Forces (Vozdushno-Kosmicheskaya Oborona – VKO) were officially formed and headed by Lieutenant-General Oleg Ostapenko. Two commands were included in the structure: the Space Command and the PVO and PRO (Air and Missile Defence). In the first phase of equipping the VKO, which is placed operationally under the General Staff, the PVO/PRO Command's missile defence division and three S-44 SAM brigades stationed in Podmoskovye were tasked with protecting Moscow. It is planned to reinforce this defence with additional brigades and by 2020 to introduce the advanced S-500 air defence system.²⁸²

The Air Defence system of Russia works as follows: Fighter jets act as the first echelon, covering the area beyond the range of anti-missile systems (from 300-400km to 1,000-1,500km). At the distance of 50-100 km to 250-400 km, targets are engaged by S-300PM, S-400 and S-300V4 air defence missile systems, capable of shooting down combat jets, unmanned aerial vehicles and airborne command posts deep in the enemy's formations.²⁸³

Medium-range surface-to-air missile systems, such as Vityaz (with a range of up to 120 km) and Buk (with a range of up to 30–70 km), cover the further stretch of the way to the vital military facilities. The Russian air defence is currently equipped with just ten systems of this type, supplied in 2010. The missile weapon system consists of command post, an X-band multi-functional fire control, tracking and surveillance radar, and up to three missile launchers with ten 9M96E missiles or two 9M100 short-range missiles replacing one 9M96E missile. The Vityaz system is able to detect and track up to 40 targets simultaneously while engaging eight of them with two missiles per target. ²⁸⁴

²⁸² McDermott, 2012b; *Krasnaya Zvezda*, 18 December 2011

²⁸⁰ Ibid.

²⁸¹ Ibid.

[[]http://eng.mil.ru/en/structure/forces/air.htm].

The Voice of Russia, 25 April 2012, "Russia's new air defense systems: Pantsir to shield S-400" [http://www.defencetalk.com/russias-new-air-defense-systems-pantsir-to-shield-s-400-41937/]; Deagel.com [http://www.deagel.com/Air-De-fenseSystems/Vityaz_a002482001.aspx].

²⁸⁴ Kramnik, 2012a.

The plan to renew Russian Air Defence in the near future includes also the acquisition of 100 (ten battalions) new, still under development, S-500 Samoderzhets ("Czar") surface-to-air missiles, the first to be completed by 2013 and 56 battalions of S-400Triumf (SA-21 Growler) missile systems. Two air defence regiments were armed with this system prior to 2010 and an additional five were to be procured in 2011. S-400 missile system is able to destroy cruise missiles and tactical missiles 400 km away. The S-400 missile system is already operational around Moscow and Kaliningrad. A standard battalion includes eight launchers with four missiles each.

The goal is to have as many as 23 S-400 air defence missile 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 claimed to be 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 2010.²⁸⁷

All air defence regiments in the Russian Armed Forces will be equipped with advanced S-400 Triumf and Pantsir-S missile systems by 2020, Prime Minister Vladimir Putin said in March 2011. "We are planning to revamp our air defence network. All air defence regiments will receive new S-400 Triumf and Pantsir-S systems," Putin told defence industry officials commenting on the state arms procurement program until 2020.²⁸⁸

The S-400 system has a maximum range of up to 400 km and may engage targets up to an altitude of 40-50 kilometres. The system uses a range of missiles, optimized for engaging ballistic and cruise missiles.

Pantsir-S is a short-to-medium range combined surface-to-air missile and antiaircraft artillery system designed to protect point and area targets.²⁸⁹ It carries up to 12 two-stage solid-fuel surface-to-air missiles in sealed ready-to-launch

²⁸⁵ RLA Novosti, 9 April 2012, "S-400 Missiles Deployed in Russia's Baltic Fleet", [http://en.rian.ru/military_news/20120409/172702870.html]; See also NTI Global Security Newswire, 18 April 2012, "NATO Objects to Russian Deployment of Antimissile Units in Kaliningrad" [http://www.nti.org/gsn/article/nato-objects-russian-deployment-antimissile-systems-kaliningrad/].

²⁸⁶ Gorenburg, 2011a.

²⁸⁷ Gorenburg, 2011.

²⁸⁸ RLA Novosti, 21 March 2011, "Russia to Revamp Air Defence with S-400, Pantsir-S Systems" [http://en.rian.ru/mlitary_news/20110321/163128228.html].
²⁸⁹ Ibid.

containers and has two dual 30 mm automatic cannons that can engage targets at a range of up to 4 km.²⁹⁰

Russia planned to station several new S-400 Triumf air defense systems near its borders in 2012, former Air Force Commander-in-Chief Alexander Zelin stated. "The Russian Armed Forces will receive several S-400 air defence missile systems this year," Zelin told RIA Novosti. "This time they will be deployed in air defence units guarding [Russia's] border regions."

The Navy

The Russian Naval Headquarters officially moved to St. Petersburg after several years of plans and delays. On the Senate Square a ceremony was held and the Andreyevskiy flag hoisted over Admiralty in a light snowfall November 7, 2012. ²⁹¹

The latest Russian armament program for the Navy includes 100 fighting ships. In addition to strategic nuclear submarines the ten year program (2011–2020) includes acquisition of following ships and weapon systems:

- 35 Corvettes (including Stereguschiy class, Project 20380),
- 15 Frigates (nine Project 22350 and six Project11356M),
- 20 new 5th generation multi-purpose nuclear attack submarine (for example nuclear powered Yasen, Project 885),
- Numerous new supply and special vessels,
- New ship-based supersonic missile system "Tsirkon-S". 292

The limits in shipbuilding have forced Russia to purchase special ships also from abroad. In 2010 Russia signed a contract with France to buy four Mistral class amphibious assault ships (LHD). Two will be acquired from France and two license-built in Russia. The deal also includes the Zenith-9 C³I system. The carriers will be strengthened and equipped so that they are able to operate with other surface combatants, submarines and air force in arctic waters.²⁹³

President Vladimir Putin visited the northern city of Severodvinsk on 30 July 2012 and attended the ceremony marking the launching of the fourth Borei class nuclear ballistic missile submarine Prince Vladimir. He also presided over a meeting on the future naval construction program. Putin underlined the importance of the naval capability of Russia: "The Navy is an instrument

²⁹⁰ Ibid.

²⁹¹ RusNavyCom, 31 October 2012, "Russian Navy HQ Finally Settled in Saint Petersburg" [http://rusnavy.com/news/navy/index.php?ELEMENT_ID=16318].

²⁹² Gorenburg, 2011b.

²⁹³ Falichev, 2011a, p. 1..

for defending our national economic interests, including in regions like the Arctic, which holds a rich concentration of bio-resources, as well as deposits of hydrocarbons and other natural resources."²⁹⁴

The naval construction program calls for investing about 4.5 trillion roubles (ca \in 111 million) over the next several years, for the construction of 51 modern surface warships, 16 nuclear attack submarines and 8 nuclear ballistic missile submarines by 2020 (two of which are now undergoing trials), all but two of the surface ships to be built in Russian shipyards. This will allow the share of modern vessels and equipment making up the naval forces to be brought to 70 percent by 2020, Putin said. An explicit part of the program is the upgrading of Russia's defence industry, which has been slow to deliver new weapons in recent years. ²⁹⁵

²⁹⁴ President of Russia, 2012c; Russia Today, 31 July 2012, "Bid For Naval Dominance: Russia Significantly Boosts Nuclear Fleet" [http://rt.com/news/russia-navy-nuclear-submarine-fleet-450/]; NTI Global Security Newswire, 31 July 2012, "Putin Pledges to Bolster Sea-Based Nuclear Arms"

[[]http://www.nti.org/gsn/article/putin-pledges-bolster-sea-based-nuclear-arms/]. ²⁹⁵ Ibid.

ANNEX 3

The Development of Russian Military Potential Nearby Finland

Western Military District (WMD)

WMD includes former Moscow and Leningrad Military Districts, Northern and Baltic Fleets, Kaliningrad Special Area and 1st Air Force and Air Defence Command. The HQ of Western MD is located in St. Petersburg, in former location of Leningrad MD's HQ. Colonel-General Arkady Viktorovich Bakhin was the first CO of this Joint Strategic Command West (OSK, Obyedinyennoye Strategicheskoye Kommandovanye) 2010–2012.²⁹⁶

The Ground Forces of WMD are considerable strong. According to a Russian estimate its capability of warfare has been increased "more than 13 times" (> 90%)²⁹⁷ compared with former Leningrad Military District (LMD).²⁹⁸ Western MD includes among other two General Force Armies:

- 6th Army, HQ at Agalatovo, on Karelian Isthmus, close to Saint Petersburg and
- 20th Guards Army, HQ at Mulino, east of Moscow.²⁹⁹

In the Western Military District (WMD) there are more than 40 peace-time brigades and detached special regiments/battalions in declared permanent readiness as follows³⁰⁰:

Tank.

4. Detached Guards Tank Brigade6. Detached Tank Brigade

(Naro-Fominsk) (Dzhershinsk)

²⁹⁶ Warfare.be, "Russian Military Analysis: Western Military District – OSC West" [http://warfare.be/?linkid=2225&catid=321].

²⁹⁷ In Russia the mathematical comparison is often expressed as "times"; something is X times bigger. It is possible to calculate as per cent with formula: 100-100/X times. In this case the exact calculation is 100-100/13 = 92.3%.

²⁹⁸ Krasnaya Zvezda, 29 December 2010, "Armija Rossii: Novyj oblik "Prioritety stroitelstva Vooruzhennyh sil"" (Russian Army: Priorities of Armed Forces' Organization) [http://old.redstar.ru/2010/12/29_12/1_08.html].

²⁹⁹ Warfare.be, "Russian Military Analysis: Western Military District – OSC West."

³⁰⁰ Warfare.be; IHS Jane's; Jane's World Armies, "Russian Federation" (15 November 2012). Note: not included signal, communications, C³, ECM, elint, NBC, support, logistics, aviation, naval, space, etc. brigades neither reserve. Due to different sources there are small distinctions between the above list and the table of Annex 2 (Permanent Readiness Brigades of The Russian Armed Forces).

Motor Rifle Infantry 138. Detached Guards Motor Rifle Brigade 200. Detached Motor Rifle Brigade 25. Detached Guards Motor Rifle Brigade 27. Detached Guards Motor Rifle Brigade 5. Detached Guards Motor Rifle Brigade 9. Detached Motor Rifle Brigade 10. Motor Rifle Brigade 22. Motor Rifle Brigade 39. Motor Rifle Brigade 79. Detached Guards Motor Rifle Brigade 79. Detached Guards Motor Rifle Brigade 70. Detached Guards Motor Rifle Brigade 71. Detached Guards Motor Rifle Regiment	(Kamenka) (Pechenga) (Vladimirskiy Lager) (Vidnoye) (Kalininets) (Nizhniy Novgorod) (Novomoskovsk) (Yakhroma) (Kursk) (Gusev/Kaliningrad) (Kaliningrad)
 Spetsnaz / Recce 2. Detached Spetsnaz Brigade 16. Detached Spetsnaz Brigade 218. Separate Strategic Reconnaissance Rgt. 216. Detached Spetsnaz Battalion 	(Promezhits) (Tambov/Chuchkovo) (Sokolniki/Moscow) (Moscow)
Airborne/Commando 76. Air Assault (Commando) Division 98. Airborne Division 106. Airborne Division 45. Separate Airborne Infantry Regiment	(Pskov) (Ivanovo/Kostroma) (Tula/Ryazan/ Naro-Fominsk) (Sokolniki/Moscow)
Artillery Missile 448. Missile Brigade 26. Missile Brigade 112. Guards Missile Brigade 152. Missile Brigade	(Durnevo/Kursk) (Luga) (Shuya) (Chernyakhovsk)
Artillery 288. Artillery Brigade 9. Artillery Brigade 45. Heavy Artillery Brigade 235. Artillery Brigade 244. Artillery Brigade	(Mulino) (Luga) (Tambov) (Skopin) (Kaliningrad)
Multiple Launch Rocket System (MRLS) 79. Multiple Rocket Launcher Brigade	(Tver)
Air Defence 5. Air Defence Brigade	(Nyunemyaki
202. Air Defence Brigade	[fi. Nenimäki]) (Naro-Fominsk)

53. Air Defence Brigade (Kursk) 49. Air Defence Brigade (Elnya)

133. Guards Detached Air Defence Brigade (Strugi Krasnye)

183. Guards Detached Air Defence Brigade (Gvardeisk/Kaliningrad)43. Detached Air Defence Brigade (Znamensk/Kaliningrad)

Engineer

140. Detached Engineer Regiment (Kerro)317. Detached Engineer Brigade (Belev/Tula)

Naval Infantry

336. Detached Guard Naval Infantry Brigade (Baltiysk)

61. Detached Naval Infantry Brigade (Sputnik/Pechenga)

Coastal Missile

25. Coastal Missile Regiment (Donskoye/Kaliningrad)

522. Coastal Missile Brigade (Olenya Guba/ Kola peninsula)

These formations are part of the order of battle of the above mentioned armies or some of them are directly subordinated to the Western Military District (WMD).³⁰¹ In the WMD there are altogether more than 60 brigades/formations in declared permanent readiness or to be established from reserves in mobilisation (including all branches).³⁰² The Russian Ministry of Defence has reported plans to establish two new arctic brigades. It was decided at the Security Council in September 2008 that Russia is to deploy a combined-arms force to protect its political and economic interests in the Arctic by 2020, including military, border and coastal guard units to guarantee Russia's military security in diverse military and political circumstances.³⁰³

The first arctic brigade seems to be the present 200th Motorized Rifle Brigade at Pechenga. As possible locations of the second one Arkhangelsk, Alakurtti and even Novaya Zemlya have been mentioned.³⁰⁴ In Alakurtti village infrastructure already exists and from there is also railway connection to the vicin-

³⁰¹ Forum "Voennyj Rubezh", 24 October 2010 [http://ryadovoy.ru/forum/index.php/topic,2478.0.html]; Milkavkaz.net, 13 October 2009, "Московский военный округ" [http://milkavkaz.net/?q=node/42]; Milkavkaz.net, 13 October 2009, "Ленинградский военный округ" (Leningrad Military District) [http://milkavkaz.net/?q=node/43].

³⁰² IHS Jane's World Armies, "Russian Federation", 15.11. 2012.

³⁰³ Osborne, 2011. See also IISS, 2012, p. 187 and *IHS Jane's World Armies*, "Russian Federation".

Wezeman, 2012, pp. 8-10; REUTERS, 1 July 2011, "Russia creates two brigades of Arctic troops" (Grove, Thomas) [http://uk.reuters.com/article/2011/07/01/russia-arctic-troops-idUKLDE76017D2011 0701].

ity of Kandalaksha harbour at the White Sea.³⁰⁵ The formation of the Arctic brigades has been delayed and the schedule according to present planning is set to 2015.³⁰⁶

The Coast Guard formations (FSB) in the northern waters are to be strengthened and their presence to be increased by 2017.³⁰⁷

The strength of the training centre of the Western Military District at Mulino³⁰⁸, near Moscow, is equivalent to a former reinforced army division. Detached ground force training subcenters at Sertolovo³⁰⁹, north of Saint Petersburg and Kovrov³¹⁰ east of Mulino, almost equal the strength of a brigade.

This annex has not listed training battalions and regiments of different military schools. Under the WMD's premises there are in additional different types of supporting units and paramilitary, armed formations of other ministries. All these units will be subordinated to the Joint Strategic Command of the WMD in the time of crisis. Several maintenance and repair depots in the area will also establish reserve formations/units with the equipment at their disposal.³¹¹

The maintenance and repair depots near Finland are able to establish at least three reserve brigades, such as 62nd Motorized Rifle Brigade at Alakurtti, 41st Motorized Rifle Brigade at Sertolovo, and 4th Motorized Rifle Brigade in

³⁰⁵ *51.ru Novosti online*, 19 May 2011, "В мурманском поселке Алакуртти разместится арктическая бригада" (Arctic Brigade Will Be Deployed at Alakurtti) [http://51.ru/newsline/394717.html].

Myasnikov, 2011. See also Pettersen, 2011. For an update see *RIA Novosti*, 21 February 2012, "Russia to Field First Arctic Brigade in 2015" [http://en.rian.ru/mlitary_news/20120221/171440711.html] & Pettersen, 2012a.

³⁰⁷ ARCTICWAY.ru, 30 March 2011, "Защищать национальные интересы РФ в Арктике, являющейся по оценке президента России ресурсной базой страны, будет специальная мотострелковая бригада." [http://www.arcticway.ru/index.php ?id=173] According to the Russian President's evaluation concerning the defence of the National Resources in the Arctic Region, the Special Motor Rifle Brigade will be formed. ³⁰⁸ Nekhai, 2012.

³⁰⁹ BaltInfo.ru, 8 September 2012, "В Сертолово с размахом отметили День танкиста" (The Day of Tankman at Sertolovo) [http://www.baltinfo.ru/2012/09/08/V-Sertolovo-s-razmakhom-otmetili-Den-tankista-302955].

³¹⁰ Voyennoe Obozrenie, 29 February 2012, "467-й окружной учебный центр" (467. Training Centre of Military District) [http://topwar.ru/11741-467-y-okruzhnoy-uchebnyy-centr.html].

³¹¹ Warfare.be, "Russian Military Analysis: Western Military District OSC West."

Petrozavodsk.³¹² The 85th Detached Helicopter Regiment (Mi-24, Mi-8 helicopters) at Alakurtti will be re-established.³¹³

There are approximately 60 army depots in Russia. Most of them have the capacity to establish at least one brigade size unit. Military schools and training centres have a certain role in mobilisation.³¹⁴

The Baltic Fleet

The allocation of the total defence budget for naval forces has been about 25 percent. The strategic ballistic missile submarines of the Northern and Pacific Fleets retain their traditional role (second strike) in the nuclear triad.

The role of the Baltic Fleet is in securing the country's export – import routes, especially of energy export. The Baltic Sea is nowadays only partly under Russia's control. Because of NATO's eastward expansion and some increase of activities (for example the U.S. Patriot surface-to-air missiles in north-eastern Poland) Russia has decided to improve her military readiness in the Baltic area.

After the collapse of the Soviet Union the situation of the Russian Baltic Fleet weakened, when it lost a major bulk of its previous bases. Its main base and headquarters are located in Kaliningrad area.

The main tasks of the Baltic Fleet of Russia at present are as follows:

- Protection of the Russian economic zone and areas of productive activities, suppression of illegal productive activities,
- Ensuring safety of navigation,
- Implementation of foreign policy actions of the Government in economically important areas of the World oceans (visits, routine entries, joint exercises, and action in the composition of peacekeeping forces, etc.),
- Co-operation with other Russian naval units operating in the area, especially with the Northern Fleet.³¹⁵

³¹² Military and Security, Jane's Sentinel Security Assessments, "Russian Federation Army", 24 February 2010 [http://www.milnet.fi/www8.janes.com].

Pravitelstvo Murmanskoi oblasti (Murmansk Region Government), Press-release 28 September 2010, Discussion Between Murmansk Region Governer Dmitri Dmitrenko and Russian Defence Minister Anatoly Serdyukov about Alakurtti Air Base [http://www.gov-murman.ru/press/?d=28-09-2010_09:07]; Observationsplatsen, 1 October 2010, "Avbruten reträtt" [http://oplatsen.wordpress.com/2010/10/01/avbruten-retratt] and [http://www.hibiny.ru/news/ru/archive/20851].

³¹⁴ Pukhov, 2012 and Barabanov, 2010.

³¹⁵ Flot.com, Пресс-служба Балтийского флота (Press service of the Baltic Fleet) 23 July 2010, [http://flot.com/nowadays/structure/baltic/].

The operational forces of the Baltic Fleet include:

- Two diesel submarines,
- Five principal surface combatants (destroyers/frigates),
- 20 Coastal combatants (corvettes) and patrol boats,
- Around 70 fixed wing aircraft and some 55 helicopters of various types. 316

While renewing surface combatants the focus is in building corvettes with precision guided weapons and long ranged cruise missiles. The amphibious capability will improve drastically, if the Fleet will introduce the new amphibious assault ships.³¹⁷

If transferring other major naval combatants from the Atlantic to the Baltic Sea is part of contingency plans, they have to pass the Danish Straits before crisis.

The Northern Fleet

The Northern Fleet is the strongest and most versatile command in the Russian Navy. Its major role is the maritime component of the nuclear triad. The growing importance of northern waters emphasizes the role of this fleet and its support area. The Fleet HQ is located in Severomorsk near Murmansk. Other bases are situated mostly by the fjords of the northern coast of Kola Peninsula, and in Severodvinsk on the south-eastern coast of the White Sea.³¹⁸

The 1st Command of Air Force and Air Defence

During the current military reform, the Russian Air Forces were organized into a new system, including seven operational commands (i.e. four Air Force and Air Defence Commands subordinated to corresponding military districts, Long-range Aviation Command, Military Transport Aviation Command plus Joint Strategic Aerospace Defence Command), seven air bases of 1st class category and thirteen air-space defence brigades.³¹⁹

The Commander-in-Chief of the Russian Air Force stated in November 2010 that the Air Force HQ will take the responsibility only for combat training and general development of the branch. The Long-range Aviation Command

³¹⁶ Warfare.be: "Baltic Fleet."

³¹⁷ Leijonhielm, 2012, p. 89.

³¹⁸ Baev, 2012.

³¹⁹ Kolbin, (ed.), 2011, pp. 9-24; Gazeta.ru, 9 February 2010, "Alexander Zelin, Colonel-General: BBC России проведут ребрендинг" (The Russian Air Force is Rebranding) [http://www.gzt.ru/topnews/politics/-glavkom-vvs-zelin-vystupil-po-istrebitelyu/28 8356.html].

and the Transport Aviation Command will stay subordinated to the high command. All the rest remains under the military districts.³²⁰

Jane's World Air Forces reported that:

Russia's long-range air force has had its mission changed from nuclear deterrence to conventional strike against point targets in support of counter-insurgency operations. In 2005, the division took delivery of the first examples of the new Kh-101 conventional stealthy air-launched cruise missile and augmented its fleet with a pair of upgraded Tu-160 bombers able to carry and deliver laser-guided bombs.³²¹

While counter-insurgency operations were mentioned as a motive for the rolechange, it is obvious that these long-range weapon systems can reach anywhere in Europe.

According to its mission and tasks the Air Force's Aviation is divided into long-range, front-line, military transport and army aviation, which in turn include bomber, attack, fighter, reconnaissance, transport and special aircraft. The core of the Air Force's combat element is composed from air bases and brigades of the Air Defence.³²²

Air Force's divisional/regimental echelons have been supplanted by Air Base unit establishments, with the majority of these possessing three subordinate squadrons. In addition, a number of former Naval Aviation elements have been (and are still being) reassigned to the Air Force (these include Su-27 and MiG-31 interceptor units, Tu-22M medium-range bomber units and at least two major air bases in the Kaliningrad region). Many of the changes have been accomplished simply by transferring aircraft. This process of consolidation permits closure of a substantial number of airfields.³²³

The 1st Command of Air Force and Air Defence consists of the following formations:

- Headquarters is located in Voronezh, and the 7000th AFB in Voronezh is the main air base,³²⁴
- 1st air-space defence brigade (Severomorsk)
- 2nd air-space defence brigade (St. Petersburg)
- 6961st aviation base (Petrozavodsk) (Sukhoi Su-27)

³²¹ IHS Jane's World Air Forces, "The Engels-Based Bomber Force, Which Includes Examples of the Tu-22M 'Backfire', Tu-95MS 'Bear' and Tu-160 'Blackjack'", 27.11..2012.

³²² McDermott, 2012b.

³²⁰ Gorenburg, 2011.

³²³ IHS Jane's World Air Forces, "Russia", 27 November 2012.

³²⁴ Gavrilov, 2009.

- 70
- 6964th aviation base (Monchegorsk, Murmansk Oblast) (Sukhoi Su-24M, Su-24MP)
- 6965th aviation base (Viaz'ma, Smolensk Oblast) (Mil Mi-8, Mi-24)
- 7000th aviation base (Voronezh) (Sukhoi Su-24M, Su-24MP, Su-34).³²⁵

The inventory of the Russian Air Force may have included around 5000 fixed and rotary wing air craft before the military reform. The number of aircraft left in the Air Force and Army Aviation after the reform, has not been disclosed. The plan was to reduce them by no less than a third. A significant portion of the assets are apparently beyond repair. IISS Military Balance 2012 lists about 1 800 fixed wing aircraft and 1 000 rotary wing aircraft as combat capable. The Swedish Defence Research Establishment FOI has presented even lower numbers and predicts that the number of aircraft will continue to diminish until 2020, when equipment from the Soviet era is finally phased out. The sum of the soviet era is finally phased out.

Selected air units of Russia's Western military district have started preparations to return to abandoned Arctic airfields, the commander of the district's aviation Maj. Gen. Igor Makushev said on Wednesday 30 May 2012. The military airfields in the Arctic were used extensively in the Soviet era, but after the collapse of the Soviet Union in 1991 they have been generally mothballed. "We will start reopening airfields on Novaya Zemlya and in Naryan-Mar as early as this summer (2012)," Makushev told a news conference in Saint Petersburg. Plans for 2013 include the reopening of a military airfield on Graham Bell Island, which is part of Franz Josef Land. These plans turn out to have been more political than based on real plans and are to be considered premature. Ex-commander of the Air Force Vladimir Mikhailov says that it is too early to talk about a base of jet fighters in the Arctic. "In the current situation we don't need any base there. First we have to deal with all the problems on the main land, and only then, when we are "tougher", we will move on to Novaya Zemlya". "331

This does not, however, reverse Russia's plans to strengthen her military means to protect its political and economic interests in the Arctic region by

The numbers were calculated from the order of battle lists given by Jane's, but they probably do not represent the situation as of November 2012 accurately, since detailed figures have not been disclosed after Russia stopped CFE Treaty implementation and data sharing in 2007. See IHS Jane's World Air Forces, "Russia".

³²⁵ Gorenburg, 2011c.

³²⁷ Lavrov, 2011, p. 59.

³²⁸ IISS, 2012, p. 197.

³²⁹ Carlsson & Norberg, 2012, pp. 111 – 112.

³³⁰ Melnikov, 2012; IHS Jane's World Air Forces, "Russia."

³³¹ Pettersen, 2013.

2020. Deployment includes military combined-arms, including border and coastal guard units to guarantee Russia's military security in diverse military and political circumstances.

EXPERIENCES AND CONCLUSIONS OF THE RUSSIAN MILITARY EXERCISES SINCE 2009

Large-scale strategic military exercises of Russian Armed Forces and together with forces of other "power ministries", so called "siloviki", have been carried out in different parts of Russia on rotation basis every 1-4 years. After one such exercise, Kavkaz-2008, in August 2008 troops continued directly to the pre-planned military operation against Georgia, instead of returning to their home bases in the Northern Caucasus Military District. The next large-scale strategic military exercise Zapad-2013 (West-2013) will take place in western Russia and Belarus in 2013. The next large-scale strategic military exercise Zapad-2013 (West-2013) will take place in western Russia and Belarus in 2013.

Large-scale strategic exercises in North-West Russia have not been frequent. The year 2009 made an exception. Two large-scale partly overlapping exercises were carried out. Exercise Ladoga-2009 was carried out in a zone of 300 km x 1200 km, from Pechenga to Vyborg and further south of St. Petersburg. A few weeks later started another, even larger exercise, Zapad (West) 2009 which tested the new chain of command.

Both exercises started from the same basic scenario, invasion by enemy ground forces from the west toward western and north-western Russia, supported by air and naval forces. Exercise Ladoga took place mainly in nine separate ranges between The Arctic Ocean and Pskov oblast. The live firing climax was a launch of ballistic missiles. Both exercises were coordinated by the General Staff. Ladoga-2009 was executed under the command of Commander-in-Chief of Russian Ground Forces and Zapad-2009 under Chief of General Staff.³³⁴

One important goal of both exercises was to scrutinize the protection of flanks of two commands. New tactical and technical innovations with "good

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³³² Cohen, 2008. See also the video Студия "Альфа", г. Тверь, 7 August 2012, *Потерянный день" вся правда о Войне 08.08.08г.* (The Lost Day – the Whole Truth about the War on 8 August 2008) & Felgenhauer, 2012. The "Lost Day" film and the comments by Putin and Medvedev have revealed a great deal: that the invasion of Georgia in August 2008 was indeed a pre-planned aggression and that so-called "Russian peace-keepers" in South Ossetia and Abkhazia were in fact the vanguard of the invading forces that were in blatant violation of Russia's international obligations and were training and arming the local separatist forces.

³³³ Belarusian Telegraph Agency (BELTA), 26 October 2012, "Belarus to Host Next Belarusian-Russian Army Exercise in 2013" [http://news.belta.by/en/news/society?id=664528].

³³⁴ Khaimendrinov, 2009.

old" equipment and weaponry were used. The command, control and cooperation of troops were the focal point of both exercises. Comprehensive net work based air defence, wide signal intelligence, common communications system and automated command (ASU TZ) in one integrated net work were tested. Satellite intelligence, UAVs, electronic warfare, automated C³I will be essential factors on future battlefield.³³⁵

About 20 000 Russian and Belorussian troops participated in Exercise Zapad-2009 and about 7 400 Russian soldiers of different "power ministries" participated in Exercise Ladoga-2009. Parts of the 28th Motorized Rifle Brigade were transferred from Yekaterinburg by train to the Karelian Isthmus. Troops of 20thGuards Army from then Moscow Military District were transported to Zapad-2009 exercise area.³³⁶

Approximately 60 Russian and Belorussian combat aircraft and more than 40 helicopters were involved in Zapad-2009. New generation precision guided weapon and target acquisition systems were tested. The Joint Russian - Belorussian Air Defence System, which was founded earlier in 2009, was also proved.

Night vision capable combat helicopter Mil Mi-28Ns together with older, but modernized Mi-24 PMs operated the first time at exercises. Also Kamov Ka-50s and Ka-52s were seen. The latest model MiG-29 SMT interceptors participated also for the first time. Aged but modernized Tupolev Tu-160, Tu-95MS, Tu-22MS bombers, Sukhoi Su-27SM, Mikoyan MiG-31BM fighters and Sukhoi Su-24M2 and Su-25SM ground attack air craft were in action. Units of long range S-400 and S-300 PM SAM-batteries performed in air defence and anti air duties. Air launched precision guided weapons from Tu-polev Tu-22M3 (NATO: Backfire) bomber and tactical Sukhoi Su-24M (NATO: Fencer) attack aircraft were also tested in Belarus during this exercise. Same and same suppose the second suppose the suppose s

As to the exercise's maritime section, a naval anti-ship cruise missile P-700 Granit (NATO: SS-N-19 Shipwreck) salvo, employing so called "wolfpack" tactics, was launched from different directions for the first time in fifteen years. Maximum range of the Granit missile is about 550 km. 339

³³⁵ Ekström, 2010, p. 25.

³³⁶ Khaimendrinov, 2009.

³³⁷ RIA Novosti, 8 September 2009, "Russia and Belarus Start Zapad 2009 Military Exercise" [http://en.rian.ru/military_news/20090908/156054418.html] & Smith, 2009. ³³⁸ Semenuk, 2009.

³³⁹ Warfare.be, "SS-N-19 Shipwreck/P-700 Granit" [http://warfare.be/?linkid=2082 &catid=312].

The summary a few months after the exercise declares that major reorganizations were made or were in the final phase. Thus the Commander-in-Chief of Ground Forces emphasized e.g. following factors:³⁴⁰

In several military districts, including border and inland regions extending from Kamchatka to Kaliningrad, efficient formations have been established. Permanent-readiness brigades and airborne divisions play the most important role. Instead of the previous former six first-line assault strike divisions, altogether 85 motorized rifle, armour, missile, artillery, air assault, and various kinds of signal and electronic warfare, engineering, ABC-warfare and logistic brigades had been formed. These brigades are at full strength and fully equipped. Their combat skills were tested, for example in Ladoga-2009 and Zapad-2009 large scale exercises. The new C³I (ASU TZ) system has been successfully tested during these exercises.

Three military districts have got detached air assault brigades. They will be directly subordinated to the military districts. These brigades will serve as the mobile reserve for the Commander-in-Chief of the Joint Strategic Command. Brigades can be used in prompt actions in dangerous zones or directed to support infantry fighting units. In larger operations air assault brigades may be supported by helicopter regiments. The brigade has an organic helicopter regiment of sixty helicopters.

Each Joint Strategic Command (Military District) will have at least one helicopter brigade (70–100 helicopters). In some cases a helicopter unit (squadron) can be attached to a motorized rifle or tank brigade.³⁴¹

The Army Aviation will be transferred from the Air Force back to the Ground Forces, which is a significant advantage. This makes it easier to move air assault and infantry units to necessary directions according to battlefield's requirements. Subsequently *Mi-24* and *Mi-28N* combat helicopters assure immediate air support for brigades in all circumstances both in defence and attack.

All military districts have formed their own detached reconnaissance brigade, which will assure the necessary information about enemy at many levels. The permanent-readiness brigades of the General Purpose Forces have got their own reconnaissance battalion. The commanding officers of above mentioned units will get information from a range of 25–100 km beyond the front line. The intention is to extend gradually the range of reconnaissance up to 500 km with UAV's and other means.

³⁴⁰ Gavrilov, 2009.

³⁴¹ Litovkin, 2010.

Each military district will get or has already got a missile brigade equipped with *Iskander-M* ballistic missiles with versatile conventional warheads. These missile units are also certified to employ nuclear warheads.³⁴² The 26th Missile Brigade at Luga, south of Saint Petersburg is already operational. The system will include in addition to ballistic missiles also cruise missiles.

The Readiness of the Russian Ground Forces

The readiness of Ground Forces has been increased significantly in recent years. General Makarov, however, reported in November 2011 that all units and formations in the category of permanent readiness have been reinforced to full combat strength. These units are to be ready to execute combat operations within 1–2 hours after given order. This claim should, however, rather be interpreted as an ambition, not as an established fact. Jane's World Armies estimated in November 2012 that the majority of the Russian Airborne Forces can be deployed within 12 hours while the bulk of the Ground Forces should be operational within 24 to 48 hours, albeit in many cases with 20–40 percent deficit in vehicles. In practice, it is evident that 'permanent readiness' brigades will not appear as originally planned, to be able to maintain daily readiness at full strength. Rather there will be combat units of battalion strength in permanent readiness.

Conscript soldiers are transferred from their training centres after six months basic training to formations (brigades) of constant readiness. They can be transferred to any theatre of war at short notice.

The mobilization system of Russian Ground Forces has changed drastically in recent years. In addition to cadre brigades there are numerous (more than 60) depots/storages, each with sufficient equipment for a brigade size unit or even more.

Mobilization was exercised also in Ladoga-2009 ³⁴⁶ and again in September 2012, when an exercise was held in Petrozavodsk (Karelian Republic) under the command of the Western Military District Commander. ³⁴⁷ The local Motor Rifle Infantry Brigade (4th Detached Motor Rifle Brigade) ³⁴⁸ was called up

³⁴² Sutyagin, 2012.

³⁴³ Tikhonov et. al., 2010; Estinko, 2010.

³⁴⁴ IHS Jane's World Armies, "Russian Federation", Date posted 15 November, 2011.

³⁴⁵ McDermott, 2012.

³⁴⁶ Khaimendrinov, 2009.

³⁴⁷ Petrozavodsk Segodnya, 14 September 2012 [http://ptoday.ru/news/rest/6347/].

³⁴⁸ Warfare.be [http://warfare.be/db/linkid/1776/catid/244/].

from reserve, brought to full readiness and performed a combat exercise between 13 and 30 September 2012.349

The brigade organization is more flexible and fits better into local conflicts in comparison with previous division organization. The main function of the ground force brigades as a permanent-readiness formation is capability to operate independently with highly mobile battle groups or other brigades under common command.

War games are yet another tool used in annual command exercises that are conducted in the country's different strategic regions. In 2012 the Russian Army tested its new organizational and command structures, much like it did during the Zapad (West) 2009, Vostok (East) 2010 and Zentr (Center) 2011 exercises.350

The Russian Military Exercise Activities in 2012

The intensity and activity of Russia's Armed Forces have gradually grown over the last few years. Several factors have contributed. Main reasons are found in the recently introduced new military organisation (military command-army-brigade), adopted new equipment, weaponry and particularly test runs of the new command and control system.³⁵¹ It seems that the command system tested in Zapad-2009 and Ladoga-2009 was then still in its infancy. The Russian Armed Forces' exercises cover practically all the services and branches plus other power ministries' armed elements.

In addition, Russia has traditionally conducted exercises mutually with some other country or even multinational exercises and, of course, military exercises of her own. The year 2012 is not an exception in this respect.

As for the coming large-scale strategic exercise in 2013, the Russian General Staff has released information that the biggest exercise of the whole Russian Armed Forces will be "Zapad-2013" (West 2013) in September 2013, at the same time a Collective Security Treaty Organisation (CSTO) exercise. 352

 $^{^{349}}$ RIA Novosti, 14 September 2012, "Военные учения проходят в Карелии впервые с 90-х годов" (Military Exercise Is Held First Time in Karelia since the 1990s) [http://ria. ru/defense_safety/20120914/750088693.html].

³⁵⁰ Kramnik, 2012.

³⁵¹ Zemlya Masterov (The Land of Masters), "В России проходят военные учения военные с тестированием современных новинок военно-промышленного комплекса" (In Russia There Have Been Vonducted Military Exercises with Testing of Modern Military-Industrial Complex) [http://zema.su/blog/v-rossii-prokhodyat-voen-nyeucheniya-voennye-s-testirovaniem-sovremennykh-novinok-voenno-promys].

³⁵² The Voice of Russia, 23 October 2012, "Russia to Strengthen CSTO Alliance in Response to U.S. Anti-Missile Shield" [http://english.ruvr.ru/2012_10_23/Russia-to-strengthen-

International Military Exercises

In Central Asia the Russian, Chinese and Tajik Armed Forces took part in a common counter terrorism exercise in Tajikistan between June 8 and 14, 2012. Of the five former Soviet Central Asian states, only isolationist Turkmenistan is not a member of the Shanghai Co-operation Organization (SCO), the group named after the city where it was set up in 2001. Over the past few years China has strengthened its interests in Central Asia.³⁵³

The CSTO (Collective Security Treaty Organisation) joint drills hinged on humanitarian and anti-terror manoeuvres to synchronize command and logistics operations of CSTO member states and tested force elements assigned to the KSOR - the Collective Rapid Reaction Force. A number of international organizations were also expected to join in the drills, for instance the Red Cross movement.³⁵⁴

The joint Russian-Kazakh anti-terrorist exercise "Aldaspan-2012", was conducted in June 2012 in the Koktal exercise area in south-eastern Kazakhstan.³⁵⁵ Russia held also different military exercises with Mongolia, Kyrgyzstan, Armenia and Belarus during 2012. Already in early May (11-16) Russia and Norway held another common naval exercise "Pomor-2012".³⁵⁶

"The Northern Eagle 2012" trilateral naval exercises for Russia, Norway and the United States were held 21-25 August, in the Norwegian Sea. The Russians were represented by the Admiral Chabanenko, a Northern Fleet destroyer at the manoeuvres, Norway by the Nordkapp coast guard frigate and the U.S. by the Farragut guided weapons destroyer.

All three countries will arrange these exercises in turn. This kind of management system has previously repeatedly been tested in the Norwegian-Russian Pomor exercises and was recognized as the most effective way to work together at sea.³⁵⁷

CSTO-alliance-in-response-to-U-S-anti-missile-shield/]; BELTA, 26 October 2012, "Belarus to Host Next Belarusian-Russian Army Exercise in 2013."

³⁵³ Kilner, 2012

³⁵⁴ Kramnik, 2012.

³⁵⁵ Oruzhie Rossii, 4 June 2012, "В Республике Казахстан пройдет совместное учение «Алдаспан-2012»" (In Kazkhstan Is Conducted Common Exercise "Aldaspan-2012") [http://www.armsexpo.ru/049056050057124050056049049052.html].

³⁵⁶ *History-News*, 17 May 2012, "Pomor-2012" [http://history-news.org/?p=4747].

³⁵⁷ Arctic-Info, 21 August 2012, "The Russian Navy Held Joint Military Exercises with Norway and the United States in the Norwegian Sea" [http://www.arctic-info.com/News/Page/v-norvejskom-more-prohodat-sovmestnie-ycenia-vms-rossii--norvegii-i-ssa-].

Russian Military Exercises

Kavkaz-2012

The September 2012 war games, dubbed Kavkaz-2012, were to focus on "polishing" the armed forces' command and control units, which have received a lot of criticism over the past few years. Kavkaz-2012 was the largest Russian military exercise conducted in 2012. It was held in the area of the Southern Military Command.³⁵⁸ This time the size of the military exercise contingent involved about eight thousand personnel, was aided by up to 200 armoured vehicles, less than a hundred artillery systems, a group of ten warships and boats, as well as an unidentified number of frontline combat aircraft, helicopters, and drones.

In fact, as a gesture of goodwill the contingents in the Russian bases in Armenia, Abkhazia and South Ossetia were not involved in the exercise. According to Deputy Chief of the General Staff Alexander Postnikov, this decision was taken in order not to heighten tension in the region. Moreover, the exercise was to be held far away from the Georgian border.³⁵⁹

Ladoga-2012

Pilots from the Western Military District flew on MiG-29SMT, MiG-31 and different modifications of Su-27 fighter aircraft during "Ladoga-2012" air force exercise on 9-15 April, 2012. Military airbases in north-western Russia (Karelian Republic, Kursk, Tver and Kaliningrad oblasts) were used in the exercise. About 50 aircraft and 100 pilots participated. Live firing (gun, rocket and missile) took place above Lake Ladoga and its shore area. ³⁶⁰

Air Force and Air Defence Exercise

The Western Military District conducted also another tactical exercise on air defence brigade level in area of the Karelian republic, Murmansk, Leningrad and Tver regions in June 2012. The aircraft (Sukhoi Su-27 fighters and Sukhoi Su-24 fighter bombers) taking part in the exercise came from Khotilovo (Tver Region), Besovets (Karelian Republic) and Monchegorsk (Murmansk Region) airbases. In addition to flying units, the air defence missile brigades (S-300), radar and radio units formed the interception zone.³⁶¹

³⁶⁰ Voennoe Obozrenie (Военное Обозрение), 20 April 2012, "Учения ВВС и ПВО –

[http://topwar.ru/13623-ucheniya-vvs-i-pvo-ladoga-2012.html]; RosBalt, 13 April 2012, "Военные летчики уничтожили более 200 "НЛО" в небе над Ладогой" (Military Pilots Shot More Than 200 "UFOs" above Ladoga)

[http://www.rosbalt.ru/piter/2012/04/13/969335.html].

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³⁵⁸ The Journal of Turkish Weekly, 15 September 2012, "Russian Military Exercises Frighten Georgia" [http://www.turkishweekly.net/news/142005/russian-military-exerci-ses-frighten-georgia.html].

³⁵⁹ Kramnik, 2012.

[&]quot;Ладога-2012" (Air Force and Air Defence Exercise "Ladoga-2012")

³⁶¹ Andreev, 2012.

Command Post Exercise (CPX) in Kola Peninsula

On 25 October 2012, as part of a Command Post Exercise in the Western Military District, the coastal forces of the Northern Fleet made Russia's first ever sea-borne landing on the shores of the uninhabited Kotelny Island. That was a part of a wide-ranging exercise which included all the Russian armed forces' units deployed in the Kola Peninsula area.

This was the first time that combat training of this kind focused on protecting civilian facilities – research stations, drilling facilities and energy-industry installations located in the Arctic region. These were the reasons why the large destroyer "Vice-Admiral Kulakov" and the heavy nuclear-powered battle cruiser "Pyotr Veliky" were stationed in coastal Arctic waters of the Northern Sea Route. More than 7000 military personnel and 150 objects of military equipment were involved in the CPX. Training exercises conducted in the military testing zones of the Barents Sea, the sub-Arctic areas of the Northern Sea Route, the coastal regions of the Pechenga Area in Murmansk Region, and on the Sredniy and Rybachiy Peninsulas.³⁶²

138. Guard Detached Motor Rifle Brigade's Exercise

Under the command of the Western Military District the 138. Guard Detached Motor Rifle Brigade conducted in mid October a large exercise on local firing range area on the Karelian Isthmus at Kamenka (in Finnish Perkjärvi). More than 3000 troops, 150 military vehicles, army air force (incl. Mi-24 attack helicopters and Su-24 bombers) took part in the exercise. More than one hundred generals and other high ranking officers of the Western Military District staffs and other formations also visited the exercise. The most important training objects were to demonstrate strong heavy weapon fire and action against enemy's reconnaissance groups. 363

Conclusion

To sum up, there have been at least five exercises of medium or larger scale in the near vicinity of Finland in 2012, held by the Russian military. The Western Military District did not conduct any strategic level large-scale exercise in 2012. The exercise intensity has in the last year, however, grown essentially because of the diversity of several medium-size local exercises (ground force, air force, navy, mobilization, inter-arms etc). Although Russia has, on the one hand, carried out constantly growing number of different types of military exercises on a yearly basis, it has, on the other hand, strongly criticized some neighbours which have held their own manoeuvres.³⁶⁴

³⁶² Kislyakov, 2012.

³⁶³ Pochinyuk, 2012.

³⁶⁴ Pettersen, 2012; Blank, 2012.

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Woodrow Wilson International Center for Scholars

YHTEENVETO

Geopolitiikan vahva paluu maailmanpolitiikkaan on tosiasia. Vaikutukset ulottuvat myös Suomen lähialueelle. Neuvostoliiton/Venäjän vetäytyminen asemistaan Varsovan liiton maissa ja Baltian maissa kylmän sodan loputtua oli muutoksen ensimmäinen vaihe, joka samalla osui Euroopan uuden ns. yhteistyövaraisen turvallisuusjärjestelmän rakentamisen aikaan ETY-järjestön puitteissa.

Toinen vaihe, Venäjän uusi nousu entisen Neuvostoliiton maiden vaikutuspiiriin, pääsi vauhtiin viime vuosikymmenen puolivälissä ja huipentui Georgian sotaan, Ukrainan ns. oranssin vallankumouksen kaatumiseen ja Valko-Venäjän laajempaan integrointiin Venäjän järjestelmiin. Maalle on tärkeää korjata epäedulliseksi kokemansa 1990-luvun ratkaisut. Venäjä tavoittelee suurvaltaasemansa palauttamista.

Vastakkainasettelu on siten jossain määrin palannut kuvaan mukaan ja euroatlanttisen turvallisuusjärjestelyn uskottavuus heikentynyt, vaikka sitä lännessä ei mielellään myönnetä. Yhtenä osoituksena tästä on Venäjän yritys kumota Euroopan turvallisuus- ja yhteistyöjärjestön (ETYJ) tärkeimmät saavutukset, kuten Euroopan turvallisuuden peruskirjan sitoumukset vuodelta 1999. Venäjä pitää sotilasdoktriinissaan Natoa vaarana ja epäyhtenäinen Nato puolestaan Venäjää kumppanina.

Länsi-Euroopassa alettiin kuitenkin 1990-luvulla pitää sodan uhkaa niin vanhentuneena ajatuksena, että se mahdollisti Nato-maiden ja muiden länsimaiden asevoimien poikkeuksellisen mittavan alasajon ja tehtävien suuntaamisen maanpuolustuksesta kriisienhallintaan. Samalla maiden sotilaallinen valmius heikkeni olennaisesti.

Puolustusliitto Naton sisäiset vaikeudet korostuvat tilanteessa, jossa liiton tärkeimmän jäsenen Yhdysvaltain intressit kohdistuvat yhä voimakkaammin Aasian ja Tyynenmeren suuntaan. Yhdysvaltain taloudelliset resurssit kaventuvat ja erilaisten sitoumusten täyttäminen käy epävarmemmaksi. Asiaan vaikuttavat myös Yhdysvaltain perinteisten suurten eurooppalaisten liittolaisten teot ja asenteet. Nato-maa Saksan rooli on keskeinen ja erityisesti Saksan mutta myös Ranskan Venäjä-politiikka on herättänyt kysymyksiä. Suurten eurooppalaisten Nato-maiden sotilaalliset resurssit ovat kaventuneet nopeasti.

Venäjän asevoimien uudistamisprosessin taustalta on selvästi nähtävissä pyrkimys vastata eri puolilla valtavaa valtakuntaa ilmeneviin erimuotoisiin haasteisiin. Organisatorisesti on tehty ajan edellyttämiä muutoksia. Raskas ja kömpelö divisioonaorganisaatio on lännen tapaan saanut antaa tilaa joustavammalle prikaatiorganisaatiolle. Vanhoista sotilaspiireistä on luovuttu ja niiden tilalle on tullut neljä operatiivis-strategista yhteisjohtoporrasta. Leningradin ja Mosko-

van sotilaspiirit yhdistämällä muodostetun Läntisen sotilaspiirin esikunta on sijoitettu Pietariin. Tämän yhteisjohtoportaan alaisuuteen on liitetty myös Pohjoinen ja Itämeren laivastot sekä koko uuden sotilaspiirin alueen ilmavoimat ja ilmapuolustus. Tämä on samalla osoitus painopisteen siirtymisestä läntisellä suunnalla Keski-Euroopasta luoteeseen.

Venäjän rapautuneita asevoimia on ryhdytty modernisoimaan monipuolisesti vahvalla ja kasvavalla taloudellisella panostuksella, osittain myös Saksan ja Ranskan suoranaisella tuella. Vuoteen 2020 ulottuvalle varusteluohjelmalle on varattu yhteensä noin 20 biljoonaa ruplaa eli noin 500 miljardia euroa. Venäjän asevoimien kaluston laajamittainen sarjatuotanto on käynnistymässä ensi kertaa Neuvostoliiton hajoamisen jälkeen. Venäjän johdon päättäväisyys varustelusuunnitelmien toteuttamisessa näkyy tulevien vuosien nopeasti kasvavissa puolustusmäärärahoissa. Ruotsin puolustusvoimien arvion mukaan Venäjän varusteluohjelma sujuu hyvin.

Varusmiespalvelusta ei luovuta ainakaan seuraavien 10–15 vuoden aikana, mikä takaa maalle usean miljoonan miehen koulutetun reservin, joista 700 000 voidaan mobilisoida nopeasti. Vaikka Venäjä kehittää asevoimiaan ennen muuta alueellista sodankäyntikykyä varten, se varautuu myös jatkossa äärimmäisenä vaihtoehtona suurimittaiseen sotaan. Suurta reserviä tarvitaan erityisesti itäisellä suunnalla. Sitä on teknisesti mahdollista käyttää myös miehitysjoukkona.

On ilmeistä, että Venäjä tarvitsee läntisellä suunnalla pieniä, joustavia, hyvin koulutettuja ja korkeassa perusvalmiudessa olevia tehokkaita iskujoukkoja joilla on kyky saavuttaa operatiivisia tuloksia suoraan rauhan ajan ryhmityksestä. Tämä visio on uuden venäläisen sotatieteellisen ajattelun tulosta, ja se korostaa sotien alkuvaiheiden ratkaisevaa merkitystä, mutta myös ensimmäisen strategisen iskun, mukaan lukien ennalta ehkäisevien toimien tärkeyttä.

Joukkoja voidaan tarvittaessa vahventaa nopeasti. Nato-maiden alueellisen puolustuksen alasajo ja toisaalta Venäjän korkeassa valmiudessa olevien joukkojen kehittäminen ovat aiheuttaneet hämmennystä ja epävarmuutta lähialueellamme ja itäisen Keski-Euroopan valtioissa.

Venäjän joukkojen määrä entisen Leningradin sotilaspiirin alueella on vaihdellut merkittävästi Neuvostoliiton hajoamisen jälkeen. Vuosituhannen alun suurten joukkojen supistusten jälkeen suunta on taas muuttunut nousujohteiseksi. Venäjän asevoimien harjoitusaktiviteetti on selvästi vilkastunut.

Venäjän 6. Armeijan esikunta johtanee Suomen itä- ja kaakkoispuolella olevia maavoimien joukkoja. Vuonna 2010 perustettiin uusi moottoroitu jalkaväkiprikaati Pietarin eteläpuolelle. Se kuulunee kaavailtuihin korkean valmiuden joukkoihin. Kannaksella on valmiudessa maan valioyksiköihin kuuluva moottoroitu jalkaväkiprikaati Kamenkassa. Pietarin pohjoispuolella, Sertolovossa olevasta kalustovarastosta voidaan tarvittaessa perustaa prikaati. Prikaateja tu-

keva helikopteriyksikkö sijaitsee myös Karjalan kannaksella. Runsaasta, joukkoja tukevasta tykistöstä mainittakoon raskas raketinheitinprikaati, jonka heittimien kantama on yli 80 kilometriä.

Varsin merkittävä potentiaalin lisäys on uusien 450–700 kilometrin kantaman omaavien Iskander-M -ohjusten sijoittaminen Lugaan, Pietarin eteläpuolella olevaan tykistöohjusprikaatiin. Ne edustavat doktriinissakin mainittua täsmäaseistusta ja niiden kantama kattaa Baltian ohella pääosan Suomen alueesta. Iskander-M voidaan varustaa monipuolisilla tavanomaisilla taistelukärjillä ja tarvittaessa myös ydinkärjillä.

Iskander-ohjusjärjestelmälle on Venäjän puolustussuunnittelussa kaavailtu sekä tärkeä ydinpeloterooli että tehokas hyökkäyksellinen rooli eri puolilla maata. Taktiset ballistiset ohjukset ja risteilyohjukset ovat ottamassa yhä lisääntyvän operatiivis-taktisen roolin ja täydentävät rynnäkköilmavoimia erinomaisesti. Maan sotilasviranomaisilla on suuria odotuksia tämän ohjuksen suhteen.

Strategisen iskun suorittamisen kannalta Lugan Iskander-tykistö-ohjusprikaati on olennaisen tärkeä. Sen täsmäiskuja saatettaisiin käyttää ilmavoimien ohella vastustajan puolustusjärjestelmän lamauttamiseen käyttäen hyväksi tämän alhaista valmiutta.

Pihkovan alueella toimii ilmarynnäkködivisioona sekä erikoisjoukkojen (spetsnaz) prikaati. Petsamossa on yksi moottoroitu jalkaväkiprikaati sekä merijalkaväkiprikaati. Myös näiden joukkojen valmiusvaatimus on vain tuntiluokkaa. Arktisiin oloihin soveltuva Spetsnaz-erikoisjoukoista koottava Arktinen prikaati perustetaan myös Petsamoon, Venäjän maavoimien komentaja ilmoitti maaliskuussa 2011. Suunnitelmat on sittemmin lykätty vuoteen 2015. On ennenaikaista sanoa, onko kyseessä täysin uusi yksikkö.

Sallan itäpuolella sijaitsevaa Alakurtin lentotukikohtaa kunnostetaan ja sinne sijoitettaneen uusittu helikopterirykmentti. Sen kalusto käsittää rynnäkköhelikoptereita ja aseistettuja kuljetus-helikoptereita. Alueella olevasta kalustovarastosta perustettaneen moottoroitu jalkaväkiprikaati, jota helikopterirykmentti voi tukea. Myös Petroskoissa sijaitsevasta kalustovarastosta voidaan perustaa ainakin yksi prikaati, jonka kykyä demonstroitiin liikekannallepano- ja taisteluharjoituksessa syyskuussa 2012.

Lehtusiin, Pietarin pohjoispuolelle on valmistunut tehokas tutka-asema mm. antamaan ennakkovaroitusta mahdollisesta strategisesta ohjushyökkäyksestä. Lisäksi Suursaaressa on jälleen pitkähkön tauon jälkeen rakennettu uusi ilmavalvontatutka-asema. Suomenlahden ohella se tulee kattamaan muun muassa Viron ja koko eteläisen Suomen ilmatilan.

1. Ilmavoima- ja ilmapuolustusalueella, Pohjoisen laivaston ja Itämeren laivaston ilmavoimilla on yhteensä yli 200 erityyppistä taistelulentokonetta, toista

sataa taisteluhelikopteria ja vastaava määrä aseistettavia kuljetushelikoptereita sekä paljon muita erikois- ja kuljetuskoneita. Alueelle tukeutuu lisäksi eräitä muita ilmavoimien yksiköitä.

Venäjän ilmavoimat ovat kaikkialla nopeasti mobilisoitavissa ja yksiköt ovat jatkuvassa valmiudessa ja täydessä sodan ajan kokoonpanossa. Niitä voidaan siirtää lyhyessä ajassa kaukaakin halutulle kohdealueelle.

Uusia raskaita S-400-ilmatorjuntaohjuksia, joita aiemmin oli operatiivisina vain Moskovan suojana, on nyt myös sijoitettu Kaliningradiin. Lugan Iskanderohjusten ohella myös tämä on vahva poliittinen signaali. S-400 voisi kriisitilanteessa vaikeuttaa toimimista Itämeren alueen ilmatilassa merkittävästi ja käytännössä ehkä sulkea ilmatilan täysin. Asia vaikuttaa suoraan kysymykseen Baltian maiden puolustamisesta, josta erityisesti Ruotsissa on kannettu huolta.

Ruotsin sotatiedeakatemian *Nationell strategi för närområdet* -tutkimushankkeen yksi merkittävä tulos oli, että Nato todennäköisesti ei ehtisi reagoida kyllin nopeasti mahdollisessa sotilaallisessa konfliktissa Baltian maissa, vaan joutuisi tapahtuneiden tosiasioiden eteen.

Venäjällä on julkisuudessa esitetty yhä enemmän arvioita Suomen kuulumisesta Venäjän etupiiriin ja vastustettu yhä selvemmin Suomen Nato-jäsenyyttä ja pohjoismaista puolustusyhteistyötä.

Suomen puolustusvoimien päätehtävänä pysyy oman maan puolustaminen. Valitun alueellisen puolustusjärjestelmän rauhan ajan valmius on matala. Tämän tulisi olla ympäristöä rauhoittava elementti, mutta samalla se asettaa suuria vaatimuksia valmiuden kohottamisjärjestelyille.

Suomen puolustusvoimien rauhan ajan vahvuus on Euroopan pienimpiä, noin 30 000 henkilöä. Erityisesti rauhan ajan maavoimat on käytännössä koulutusorganisaatio. Taistelujoukot muodostetaan vasta reserviläisistä perustamalla.

Harhaanjohtavia, puutteellisia ja tarkoitushakuisilta vaikuttavia ovat vertailut, joissa Suomen täyden liikekannallepanon edellyttämää vahvuutta, 230 000, verrataan väestöltään moninkertaisten, pinta-alaltaan paljon pienempien ja geopoliittiselta asemaltaan kokonaan toisenlaisten maiden ammattiarmeijoiden rauhan ajan vahvuuksiin.

Suomen alue on suuri ja reserviä tarvitaan paljon lukuisien kohteiden suojaamiseen koko valtakunnan alueella sekä korvaamaan liikekannallepanon hävikkejä ja ensi-iskuissa aiheutuvia tappioita. Koko vuosittaisen ikäluokan kouluttaminen on tarpeen jos aiotaan saada riittävästi yksiköitä. Suuri reservi on osoitus maanpuolustustahdosta ja siitä, että vastarintaa on tarkoitus jatkaa jopa maahantunkeutumisen jälkeen. Tämän ennaltaehkäisevä arvo on suuri.

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Stefan Forss has a doctorate in physics and is Docent at the Department of Strategic and Defence Studies of the Finnish National Defence University. Between 1985 and 2005 he was Ministry for Foreign Affairs consultant at the Technical Research Centre of Finland (VTT), leading research on issues concerning arms control, weapons technology and particularly nuclear weapons. From 2005 to his retirement in 2012 Forss was senior researcher at the Ministry for Foreign Affairs, working with essentially the same issues as before, including security and military policy, at the Department of Strategic and Defence Studies.

Brigadier (ret., GS) Lauri Kiianlinna retired from active service as Chief of Staff at the Finnish Eastern Military Area in 2005. Among his various positions during his career, working as defence attaché in Moscow, as commander of the Savonia Brigade and administrative Director at the Finnish National Defence University can be mentioned. Brigadier Kiianlinna's graduation work dealt with the development of Soviet military operational art and tactics.

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