

## **Chapter 5**

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### **Russia: Crafting an East Asian Strategy with an Eye on China**



Vladimir Putin has announced his candidature in the upcoming Russian presidential election, making it virtually certain that the country will see another Putin administration from 2012, but no significant change is expected in either internal or external policy. Nevertheless, the administration's approval ratings have been falling, and there is a political groundswell of antiadministration sentiment. In view of this, the political base of the next administration will not be completely rock-solid, and the administration will face difficulties in its handling of the government. On the diplomatic front, a turnaround is being observed in Russia's policy vis-à-vis East Asia, as a result of the rise of China, and the country is seen to be moving away from its former close relationship with the East Asian giant. In line with this change in Russo-China relations, Russia now has the elbow room to fashion its own unique policy with respect to the Korean Peninsula, and a sudden improvement in the relationship between Pyongyang and Moscow has been observed.

Fueled by the high price of crude oil, the Russian economy posted a year-on-year growth rate of approximately 4 percent in 2011, but the government is continuing its efforts to modernize the economy, with the aim of transitioning from the current model of heavy dependence on natural resources to a more sustainable growth model. Meanwhile, the Western advanced economies, beset by financial challenges and the ongoing sovereign debt crisis, are looking to sustainable growth by the Russian economy to help pull them out of their current difficulties. The realization has taken hold among these leading advanced economies that the modernization of the Russian economy is in the common interest of all. Partly in the aftermath of the nuclear accident in Fukushima, demand for natural gas is expanding worldwide, and this has raised Russia's international profile, as it possesses major reserves of natural resources. In the East Asian energy market, the Russians have put off negotiations with China over more advantageous terms for the export of natural gas, while at the same time they are building the infrastructure required to enable the export of natural gas from the Russian Far East in liquefied natural gas (LNG) form. In these ways, Russia is taking the first steps in pursuit of an energy strategy through which it seeks a dominant position in the East Asian market.

With respect to the activities of the Russian military, the authorities have commenced work on the modernization of the country's armed forces under the *State Weapons Program for 2011-2020*. They plan to modernize armed forces in the

area of information technology, where they have fallen far behind, to strengthen capabilities in the fields of strategic nuclear weapons, strategic defense, and precision-guided weapons, and to place priority on arming Russian forces in the country's Far East with the latest weaponry. A number of military exercises have been held recently to test the effectiveness of military reform measures as well as the military's ability to successfully collaborate with the forces of allied countries. Particularly notable was the large-scale operational and strategic exercise "Tsentr (Center) 2011." At the same time, Russia has been stepping up its military activities in the vicinity of Japan, including holding a large-scale military exercise in September 2011 on the eastern side of the Kamchatka Peninsula in the Russian Far East. A growth trend has been observed in arms exports, and Russia has been strengthening its international cooperation in the field of military technology, particularly with India, but the recent political turmoil in Middle Eastern and North African countries could have an adverse impact on the country's arms exports.

## **1. Preparations for the Inauguration of a New Administration, and New Policy Issues**

### **(1) Prime Minister Putin Announces Intention to Run for Presidency in 2012**

In line with the end of the first four-year term of President Dmitry Medvedev, an election to choose Russia's president for the next four years will be held on March 4, 2012. In view of the tandem structure under which the country has been ruled since 2008 by President Medvedev and Prime Minister Putin, it has been repeatedly asserted that the two men have decided between themselves which of them would run for president this time. Against this background, at a convention of the ruling United Russia party on September 24, 2011, attended by both men, President Medvedev called on the party to endorse Prime Minister Putin's presidential candidacy. Putin accepted this proposal and stated that in the event of his election as the next president, he felt certain that Dmitry Medvedev would lead the Government of the Russian Federation. With this, it became clear that Prime Minister Putin would run for the presidency. The public approval ratings of the other candidates, such as Communist Party leader Gennady Zyuganov and Liberal Democratic Party leader Vladimir Zhirinovskiy, were expected to remain at the low levels seen in the previous presidential election. Putin's re-election to

the presidency was thus seen as a certainty. Under the current constitution, the number of consecutive terms for which a president may hold office is limited to two. The constitution was amended at the end of 2008, extending the term of office from four years to six and thus making it possible for the next president of Russia to stay in the post until the year 2024. Moves have recently been observed to essentially deify Putin as a sort of “father of the nation.” Thus, if Putin becomes the next president, rather than this being merely a return to his previous post, we cannot discount the possibility that he would assume the position of a national leader whose rule harks back to that of the tsars of the Russian Empire.

Despite the strong influence exercised by Prime Minister Putin since 2008, the Putin-Medvedev tandem has realized political stability without any serious differences or disputes between the two statesmen. The two have had a close working relationship for more than twenty years, and Medvedev, who lacks his own political base and was essentially appointed by Putin as his successor in the post of president, is hardly likely to oppose him. It would be reasonable to assume that Putin made the final decision as to which of the two would run for president. Even so, a large number of inconsistencies have been noted in the public utterances of the two men on such separate policy issues as economic modernization, sanctions against the Libyan regime of Muammar Gaddafi, membership of the World Trade Organization, cereal trade embargoes, and antiterrorism measures, leading some observers to speculate that there was a serious policy conflict between the two. However, an analysis of the statements made by the pair, and of their timing, suggests that the apparent differences between the two are a ploy designed to whip up public interest in the upcoming presidential election by pretending that a debate over policy is ongoing. Their intention seems to have been to avoid the decline in public interest in the election, and a low voter turnout, that would have resulted from clarifying too early which candidate was virtually certain to win.

It was generally thought that the announcement as to which of the two politicians would run for president would be made after the results of the elections to the State Duma (the lower house of the Russian parliament) were revealed on December 4, 2011. In the event, contrary to the majority of prognostications, the announcement was made on September 24. The main factor behind this was a decline in the current administration's approval ratings. According to polls conducted by the Public Opinion Fund, President Medvedev's approval rating was

55 percent in January 2011 but had dropped to 43 percent by October, while Prime Minister Putin's rating fell from 63 percent to 49 percent over the same period. The approval ratings of both politicians had been holding steady prior to this, but the decline became notably steep from the start of 2011, and the administration appears to have felt that a crisis was approaching.

This decline in public support for the administration stems from a growing feeling among the Russian public that the country's political situation is stagnating amid Vladimir Putin's prolonged domination of the scene since the year 2000. Beginning with protests against perceived irregularities in the process of the legislative elections to the State Duma, December 2011 saw massive antigovernment protests, principally in Moscow. It was clear that a major political movement was underway against the current administration and was growing in strength. Both Putin in 2004 and Medvedev in 2008 had garnered over 70 percent of votes in the presidential elections, but it will be difficult for Putin to replicate this feat in the upcoming election. While this decline in the approval ratings of the current leadership will not affect the result of the presidential election, as explained below, the fact that the president of Russia is directly elected by the people means that these lower ratings will have a major effect on the strength of the new administration's political foundations. The early announcement of Putin's intention to seek re-election to the presidency has not only turned Medvedev into a lame duck president, but has also had the drawback of causing friction between the various political forces that support Medvedev and Putin, respectively. Prime Minister Putin enjoys the highest approval ratings in the opinion polls, and it is believed that United Russia, the current ruling party, put its full support behind Putin's candidacy with the aim of slowing down the decline in the number of seats in the State Duma in the recent election.

Another factor is Russia's increasing presence on the international stage, as symbolized by such upcoming events as the scheduled holding in September 2012 of a summit of the Asia-Pacific Economic Cooperation (APEC) forum in Vladivostok in the Russian Far East, and the holding of the 2014 Winter Olympics in the southern Russian city of Sochi. In view of the constantly changing leadership of the other major nations such as the United States and China, in particular the fact that the leadership of both Russia and China is set to change this year, it seems to have been agreed that Putin is the man most capable of effectively handling any diplomatic problems that may arise in Russia's relationships with

these countries.

Just as no significant change in policies was seen when the Putin presidency gave way to the tandem structure in 2008, Putin's return to the office of president is not expected to lead to any major change in either domestic or international policies. In February 2008, just before Putin left office, *Russia's Development Strategy through to 2020* (commonly known as the "Putin Plan") was made public. In other words, upon Dmitry Medvedev's assumption of office, Russia's medium-term strategy had already been decided and set out, and during his time in office he did not succeed in putting forward a national strategy of his own that deviated from this overall framework. In fact, in May 2009, in line with the Putin Plan, a top-level document known as the *National Security Strategy through to 2020* was released, and specific individual state policies have been almost completely in line with the gist of this document. When Vladimir Putin returns to the presidency in the spring of 2012, he will no doubt quietly resume his pursuit of the goals of a national security strategy already outlined in the Putin Plan. While this means that Russia's actions vis-à-vis the outside world will be easier to predict, since the country's medium-term policy direction has been laid down, it is also one of the causes of the declining interest in the country's politics among the Russian people.

## **(2) Effects of the Decline in the Administration's Approval Ratings**

The current administration has been deploying a variety of stratagems to improve its political base, in an attempt to cancel out the negative political effects of the decline in its approval ratings. Broadly speaking, the foundations of political power in Russia can be divided into the political elite in the State Duma, local elites in the regions, and the *siloviki* (the political elite from the military or security services). Each of these constitutes a powerful voting bloc, and with the approach of two major elections, the administration puts its full effort into consolidating its hold over these political bases. The same phenomenon can be seen in the run-up to the coming presidential election.

The number of seats that Prime Minister Putin's United Russia party manages to secure in the election to the State Duma, which form a prelude to the presidential election, will have a major impact on the party's choice of a candidate in the presidential election. According to polls conducted by the Public Opinion Fund, the approval ratings of United Russia had fallen from 55 percent in 2009 to 41

percent in October 2011. On March 13, 2011, simultaneous local elections were held in Russia's seventy-two regions, and the results of these elections confirmed the slide in the party's public support. In response to this trend, in May 2011 Prime Minister Putin announced the formation of the All Russian National Front, a political campaign organization intended to mobilize wide support for United Russia ahead of the State Duma election in December 2011. This organization has received the support of around 1,600 civil society groups including those representing students, teachers, women, retired military personnel, and pensioners, as well as labor unions, chambers of commerce, and other business organizations. The main reason for Putin's formation of the All Russian National Front is the need to gain the support of those unaffiliated voters who are leaning towards the current ruling party, with the goal of ending the slide in United Russia's approval ratings by mobilizing a range of middle-of-the-road political forces.

Despite these efforts, in the State Duma election held on December 4, United Russia gained a share of the vote of only 49.32 percent, less than 50 percent and down sharply from the 64.30 percent it had achieved in the previous election in 2007. There are 450 seats in the State Duma, and while United Russia had formerly held 315 seats, giving the party the absolute majority (two thirds of all seats) required to avoid a presidential impeachment or amend the constitution, this has fallen by 77 seats to 238 in the recent election. The administration's political base in the Russian parliament has thus been weakened, and the opposition parties will have more influence over proceedings in the State Duma.

The country's regions constitute the second major political base. The Russian Federation comprises eighty-three constituent entities, and while there are differences in degree from one region to another, in many cases the local governments collude with the ruling party in election campaigns, thus serving as vote-gathering machines for the administration. During Putin's previous presidential term certain steps were taken to centralize power in Moscow, such as the abolition of direct elections for regional leaders. Since the inception of the tandem structure, too, a large number of the older regional leaders who had exercised power since the early 1990s have been forced to leave the scene. In this way, the central government has been tightening its control over regional politics. Meanwhile, as part of a more conciliatory approach to the regions, both President Medvedev and Prime Minister Putin have made frequent inspection tours of the regions, and in what is seen as "pork-barrel politics," various federal programs



have been drawn up to promote regional development. In November 2010 President Medvedev became the first Russian head of state to visit Kunashiri Island, one of the Kuril Islands that is controlled by Russia but claimed by Japan under the name of the Northern Territories. Subsequently, a number of further visits to the disputed Kuril Islands were made by high-ranking members of the Putin's cabinet. These moves are seen as part of a campaign to convince the public in all parts of Russia that the administration is putting its full efforts into promoting regional development, and that it would not abandon any part of Russian soil, no matter how peripheral. This is an effective electoral strategy to take political control over the regions, which are such an important part of the administration's political base. President Medvedev has indicated his intention to restore the system of direct elections for regional leaders such as the presidents of republics and the governors of provinces. This shows the administration's concern with cementing its hold over its regional political base.

The third of these political bases is the so-called *siloviki*—politicians who are ex-members of the security or military services, such as the former KGB (Soviet Committee for State Security)—and the secret police. To encourage the support of this class, the administration employs both the “stick”—such as investigations on charges of corruption, and organizational “restructuring”—and the “carrot,” including pay raises and budget increases. In particular, the administration has occasionally been seen to offer considerable incentives to the military to deliver a large mass vote. The most obvious “bribe” to the military is to boost the national defense budget, and in other ways the administration has been observed to accede to almost all the military's requests, such as the drafting of plans for the modernization of the armed forces, the purchase of weapons from abroad, and the holding of military parades and maneuvers. The classic example of this was the political decision to increase the number of officers in the armed forces by 70,000 in direct contravention to the general direction of military reform. The tug-of-war between the administration and the military is unfolding in a direction favorable to the latter, and against the backdrop of declining public support, the administration is leaning notably toward making concessions to military interests.

For example, Finance Minister Alexei Kudrin, who pursued a fiscal austerity policy, criticized President Medvedev for approving increases in the defense budget, as a result of which he was rebuked by the president and resigned his ministerial post on September 26, 2011. On the other hand, the administration

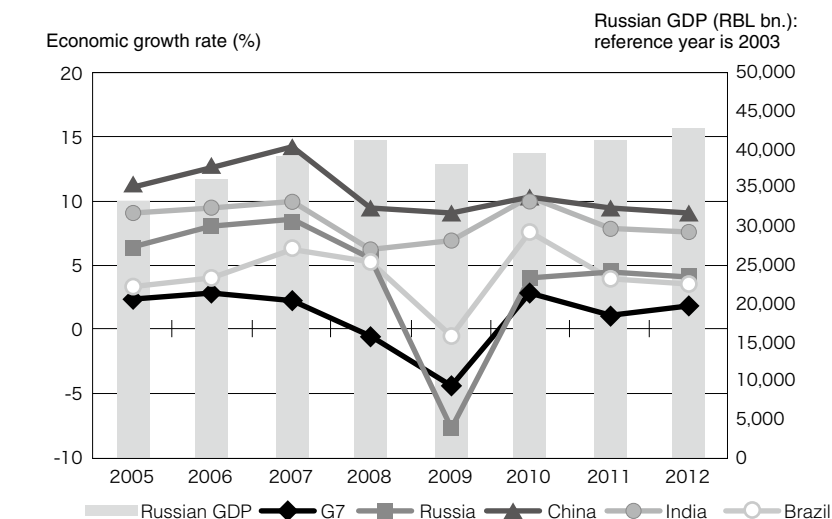
has been observed to take certain steps to control the siloviki. On May 6, regulations relating to the Security Council of Russia were amended to enable the secretary of the council to directly monitor activities by the siloviki. As the commander in chief of the armed forces of Russia, the president exercises direct control over the country's military, but with this the regulatory powers of the secretary of the security council, who assists the president, have been strengthened, and the supervisory function of the president over the military has thereby also been rendered stronger. On September 13, 2011, Secretary of the Security Council Nikolai Patrushev paid a visit to the Far Eastern Federal District. His visit included trips to Yuzhno-Sakhalinsk in Sakhalin Oblast as well as to Kunashiri Island and Suishojima (part of the Habomai Islands) in the disputed portion of the Kuril Islands, on which occasion he also inspected military units and units of the Border Force.

The decline in the approval rates of the administration is forecast to continue even after the presidential election, and while the new administration can be expected to strengthen its control over the State Duma, the regions, and the siloviki, this could well rekindle criticism from the international community that Russia is reverting to authoritarian state rule. In any event, the political foundations of the new Putin administration are not likely to be as solid as in the previous Putin administration from 2000 to 2008. Consequently, the president is likely to face considerable difficulties in controlling the government.

### **(3) Expectations by the International Community vis-à-vis the Russian Economy**

The economic growth rates of the United States and other Western advanced economies in 2011 fell below 2 percent as a result of fiscal problems and the sovereign debt crisis, but the Russian economy continued to post growth of over 4 percent, as in 2010, and the country's GDP has largely recovered the levels seen prior to the international financial and economic crisis of 2008. During the period since 2008 Russia has managed to more-or-less balance its fiscal revenue and expenditure, and the ratio of general government gross debt to GDP has been maintained at a healthy level of 12 percent or thereabouts. For these reasons, the international community as a whole fears that the European sovereign debt problem may precipitate a recurrence of the global financial and economic crisis, and is looking to the Russian economy to shore up the global economy. Specifically,

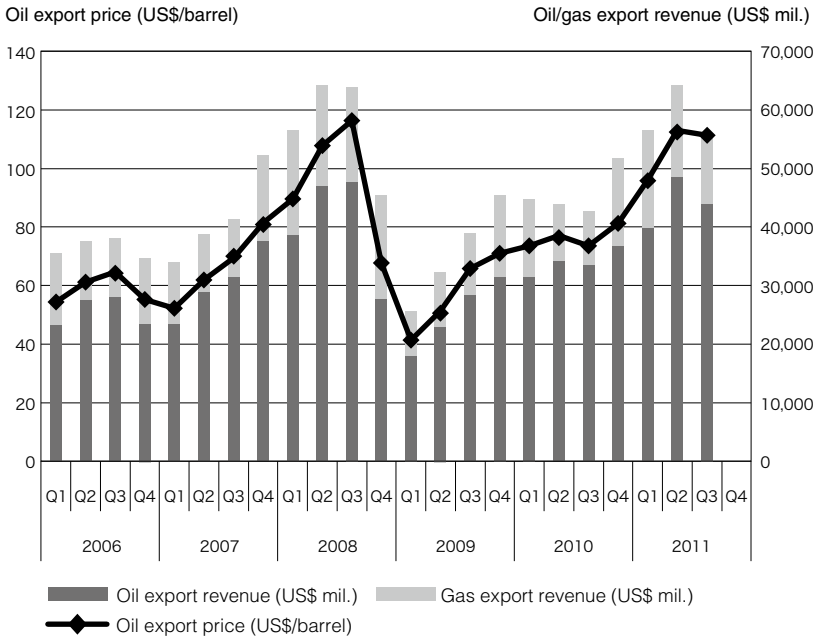
**Figure 5.1. Russia's real GDP compared with real economic growth rates of major countries**



Source: Compiled from IMF, *World Economic Outlook*, January 2012

as was discussed on the occasion of the visit to Russia by Managing Director of the International Monetary Fund (IMF) Christine Lagarde following the G20 meeting last November, it is hoped that Russia will be able to provide financial assistance to European countries via the IMF, that it will open its market wider, and that it will make effective investments in and loans to economies with which it has particularly strong links, such as those of Central and Eastern Europe as well as Central Asia, thereby helping realize economic stability and growth. In addition, discussions at the summit meeting between Russia and the European Union (EU) in December focused on harnessing cooperation between the EU and Russia to stabilize the global economy. At this summit, President Medvedev expressed his intention to provide support to the European economies via the medium of the IMF.

While in this way the hopes of the international community for a contribution by the Russian economy are rising, it has become in the common interest of all members of the international community for Russia to solve one of the major structural problems afflicting its economy, i.e., its overdependence on exports of natural resources. If we look at the true picture behind the growth of the Russian

**Figure 5.2. Oil export prices and revenue from exports of oil and gas**

Sources: Compiled from materials released by the Federal State Statistics Service and the Central Bank of Russia.

economy in 2011, we find that it was principally driven by firm exports to Europe of natural gas, whose price rose in lockstep with the prices of oil exports and oil prices overall, as well as brisk consumer spending.

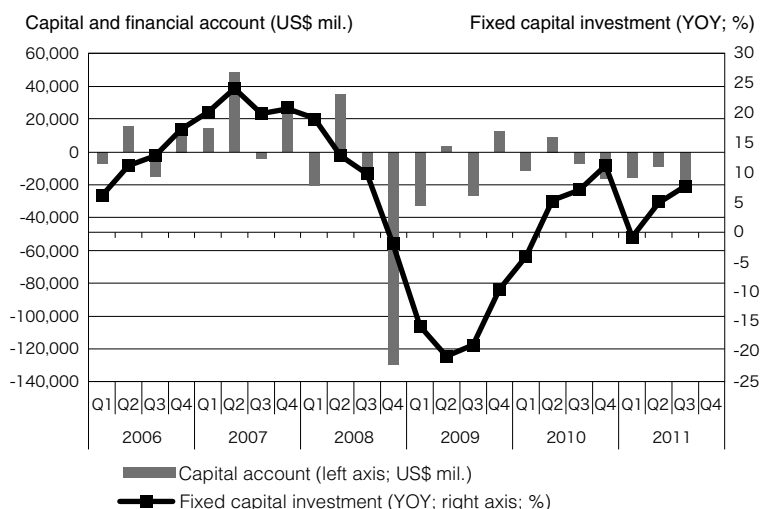
However, as the majority of consumer spending was on imported goods, imports naturally increased, not only cancelling out the growth portion of the country's oil and gas exports, but also expanding the non-energy current account deficit. This kind of economy, dependent on exports of natural resources, carries the built-in risk that in the event of a fall in international oil prices, the country would post a major current-account deficit and the government would find it difficult to carry out fiscal management dependent on revenue from oil and gas exports. In such a scenario, if Russia's other industrial sectors, excluding the oil and gas industries, were adequately developed, the country's balance of payments would remain stable despite some contraction of the economy. Moreover, a steady inflow of income from these other industrial sectors would give the government the financial leeway to pursue discretionary economic policies. In fact, however,

Russia has not yet developed any industries capable of supporting the economy in the event of a slump in international oil and gas prices, and the country is completely vulnerable to the materialization of such a risk. The Russian government is aware of the dangers that its excessive reliance in exports of resources could lead to a simultaneous deterioration in the international balance of payments and public finances, thus causing prolonged economic stagnation, and it has for some years been making efforts to reform the structure of the Russian economy. What is different now is that the international community has taken a new look at the Russian economy's structural issues, and has realized that finding a solution is in the common interest of all members of the community.

#### (4) Efforts to Modernize the Economy

Since the end of 2009 the Russian government has been pursuing an economic modernization program aimed at transforming the country's economic structure into one in which sustainable growth is led by innovative technologies. Considerable capital as well as technological development would be required in order to nurture the industries and individual companies that would act as the engine of growth, and neither capital procurement nor technology development

**Figure 5.3. Capital and financial account and investments**



Sources: Compiled from materials released by the Federal State Statistics Service and the Central Bank of Russia.

within Russia would be sufficient for this task. The government has therefore been attempting to supplement them by procuring funds and introducing new technologies from overseas. However, because the United States and other industrialized Western countries have since the latter half of 2010 been suffering from a rapidly worsening credit crunch, the Russian government has been unable to secure adequate amounts of foreign capital. In fact, capital outflows from Russia have exceeded inflows

For these reasons, the Russian government's economic policies in 2011 focused on promoting fund procurement. In January 2011, at the Annual Meeting of the World Economic Forum in Davos-Klosters, President Medvedev unveiled ten specific policies for the modernization of the Russian economy, all of which sought to promote foreign investments in Russia. These policies included the privatization of state-run companies in strategic sectors that had hitherto been closed to foreign investment, as well as the drafting of a new set of rules for the Russian market to enable the country to join the World Trade Organization (WTO), and policies designed to encourage the inflow of venture capital.

At a meeting of the Commission for Modernization and Technological Development of Russia's Economy in March, President Medvedev indicated that he would take steps to end government interference in the running of private-sector enterprises, which was unpopular with foreign investors, including abolition of the practice of appointing high-level government officials as directors of companies in which the government holds an equity stake. In April, the president unveiled a series of proposals for introducing foreign capital, and submitted bills to the State Duma to relax restrictions on the participation of foreign investors in companies that are of strategic importance for Russia's defense and state security. He also ordered government agencies to monitor the progress being made in the privatization of state-run businesses, and his call for ending the appointment of government officials to corporate boards was carried out ahead of the targeted companies' annual shareholder meetings.

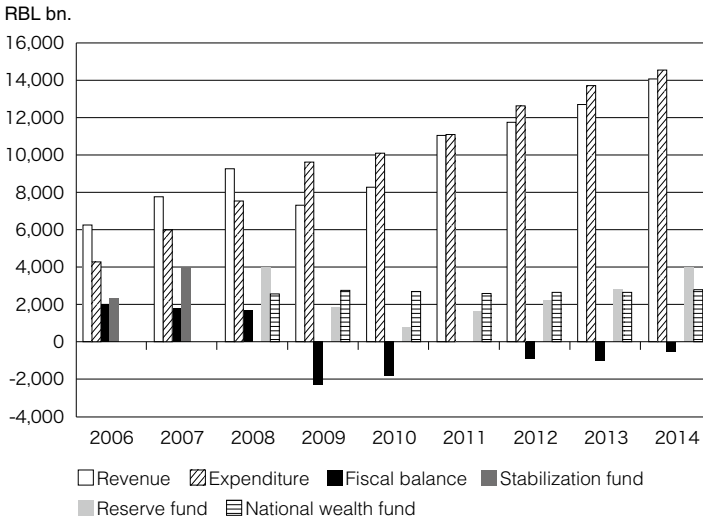
In May 2011 Medvedev held Russia's largest-ever press conference at Skolkovo in the suburbs of Moscow, with the attendance of over 800 journalists. Skolkovo, which is currently being developed as Russian version of Silicon Valley, is a central project in the government's economic modernization program. At the press conference, Medvedev once again emphasized his determination to pursue the modernization program, and at the St. Petersburg International Economic

Forum held in June he called for a transformation of the Russian economic system from one in which the state plays the leading role in directing economic activities to one where economic activity is primarily driven by free choices made by private investors. He also announced his intention to amend the privatization program announced in November 2010 to make it more attractive to private investors. In the new program, announced in August, government involvement in the management of private-sector companies was further lowered. Whereas the previous version of the program called for the government to maintain an equity stake of 50 percent in formerly state-owned enterprises while reducing the level of interference in the running of the companies, the amended program called for still further reduction in government involvement, including complete divestiture of government share ownership in certain cases, depending on the nature of the business. Moreover, the scope of companies to be considered for privatization was widened.

In contrast to the measures taken by Medvedev, which focus in this way on luring foreign capital to Russia, the measures taken by Prime Minister Putin have focused on revitalizing companies in the Russian regions and small and medium-sized enterprises (SMEs) using private-sector capital raised within the country. At regional conferences of the ruling United Russia party, Putin has discussed specific policies for revitalizing economic life in each region. Particularly notable is Putin's establishment of a Strategic Initiative Agency, announced at a South Russia wide-region conference held in Volgograd. The purpose of this agency is to provide support for SMEs, which play an important social role, and the focus of its activities is on nurturing young entrepreneurs as a means of promoting innovation centered on SMEs. In the same month of May, the first Social Business Forum was held with the participation of businesspeople from all over Russia. The Forum adopted the target of stimulating increased investment with the aim of raising Russia's GDP to within the world's top five.

A number of commentators have inferred from these differences in focus between Medvedev and Putin that the two are in conflict over the direction of the administration's policy. However, for the Russian economy, which suffers from a severe shortage of capital, it will not be enough to channel foreign capital into the country, and when one takes into account the necessity of effectively utilizing domestic private-sector capital, it becomes clear that there is no contradiction between the differing approaches of Medvedev and Putin. Rather, they complement

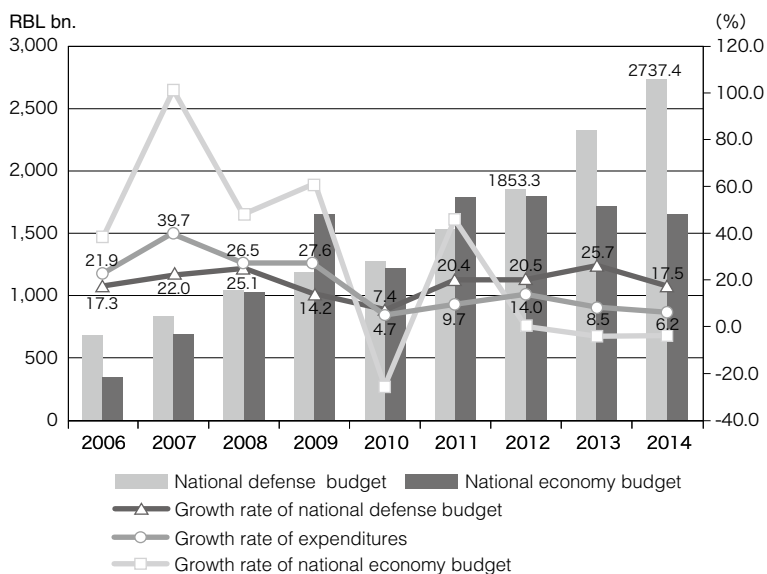
**Figure 5.4. The Russian federal budget and the reserve fund**



Sources: Compiled from Russian federal budget laws, State Duma explanatory materials relating to the federal budget, and materials released by the Federal State Statistics Service.

one another. In fact, in October 2011, Putin addressed a meeting of the Foreign Investment Advisory Council, to which the heads of leading foreign companies had been invited, and called on them to invest more in Russia. Then, in December, following the elections to the State Duma, he showed his determination to continue Medvedev's economic reform, market-opening measures, and fight against corruption. For example, he ordered a full-scale investigation into the business affairs of a certain manager of a state-owned enterprise who had repeatedly been accused of illegally amassing a fortune through investments in offshore companies. The two politicians were also active in the field of economic diplomacy. When Putin visited China in October, the focus of talks was on enlisting Chinese cooperation in a mutual program of economic modernization, centered on investment collaboration. Furthermore, Putin's proposal in October for a Eurasian Federation is believed to have been motivated by the desire to reduce the financial burden on Russia of the economic support that the country has up to now been providing to the territories of the former Soviet Union, by promoting the liberalization of trade and investment so as to develop the economies



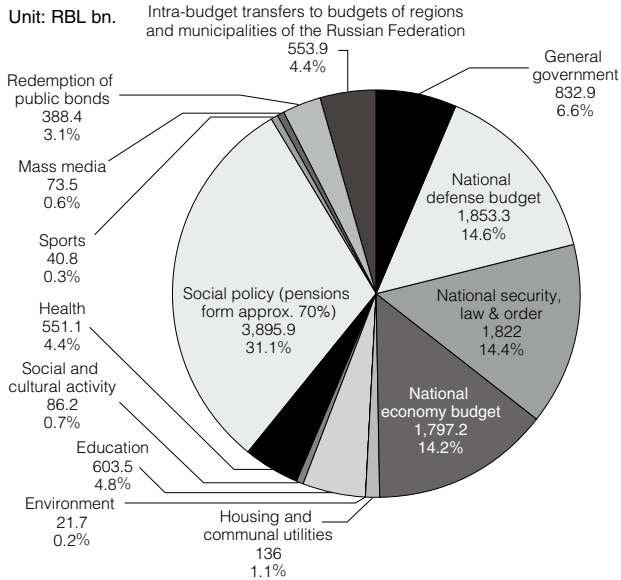
**Figure 5.5. Growth of Russia's national defense budget**

Sources: Compiled from Russian federal budget laws, State Duma explanatory materials relating to the federal budget, and materials released by the Federal State Statistics Service.

of these countries through free-market competition.

To promote trade and improve the investment environment, the international community—Europe in particular—has supported these efforts by the Russian government to reform the country's economic structure, both through individual country-by-country initiatives and via the EU's collective framework. The EU is continuing to hold talks with Russia within the framework of the Partnership for Modernization, set up in June 2010, and has strengthened its support system to resolve the longstanding issue of Russia's membership of the WTO. In December 2010 the EU revived the process of negotiations for Russia's accession to the WTO, which had stalled in 2009 with Russia's formation of a customs tariff union. Russia agreed to the conditions for membership in October 2011, and in the following month Georgia, which had been opposed to Russia's membership, reached an agreement with Russia, following which the negotiations at the WTO Working Party on the Accession of the Russian Federation were concluded. Russia's membership of the WTO was officially confirmed at a meeting of cabinet-level representatives of the WTO's members held in December 2011, eighteen

**Figure 5.6. Breakdown of 2012 budget**



Sources: Compiled from Russian federal budget laws, State Duma explanatory materials relating to the federal budget, and materials released by Russian federal agencies.

years after the start of talks.

Meanwhile, the work of compiling the Russian Federal Budget, which underpins all economic policies, did not go easily. Alexei Kudrin, who was Finance Minister at that time, was acutely aware of the risks inherent in an economy dependent on exports of natural resources and in which revenue from industrial sectors other than oil and gas was inadequate. Kudrin stressed the necessity of balancing the budget and of building up financial reserves (the Reserve Fund) in preparation for a downturn in international oil prices. At the same time, he made efforts to secure the budget appropriations needed for nurturing industries with good growth prospects, and took steps to cut wasteful expenditures. In fact, however, the Russian national coffers were much fuller than initially projected, thanks to increased revenue due to high prices of crude oil on the international market, and as a result there were calls for a large increase in expenditure from many quarters. In the end, government expenditure was expanded significantly. However, Kudrin managed to keep the Reserve Fund, which is supposed to act as a buffer against imbalances in the implementation of

the budget, at the minimum acceptable level, and he was therefore successful in compiling a budget that would allow increased expenditure under certain circumstances.

The Federal Budget covering the three-year period 2012-2014, which was passed at the end of November 2011, contained appropriations for national defense and security, law enforcement, and social security whose scale and growth rates were notably large, but the growth in the national economic budget, under which funds are earmarked for the implementation of industrial policies, was held down to a minimal level. In the background to this is the president's budget message delivered in June, which laid down the policies to be followed in drawing up the budget, and in which Medvedev clearly defined his administration's positioning of the national defense industry. In his budget message, while calling for the privatization of state-owned enterprises in order to reduce government expenditures, Medvedev excluded from the scope of his privatization initiative companies involved in important infrastructure creation and maintenance, as well as those involved in the national defense effort. The reason for this, he said, was that companies in the infrastructure and defense fields were able to attract investment, in addition to which they were able to utilize their existing research assets to play a leading role in technological innovation. This reflects the administration's vision of utilizing leading-edge technological development as an engine to drive the modernization of the Russian economy by releasing the technical innovation potential that has laid dormant up to now, through the revitalization of companies in the defense industry. At the cabinet meeting in September at which the government's budget proposals were finalized, Prime Minister Putin put top priority on three items: (1) social and economic stability, (2) economic modernization, and (3) strengthening the nation's security framework and modernizing the military. Regarding the interrelationships among these three, he explained that economic modernization was essential for social and economic stability, while the strengthening of the security framework was the foundation for all these. Moreover, at the United Russia party assembly in September at which Putin announced his intention to run for president, he gave the same explanation regarding his management of the economy. And in October he once again emphasized his belief that investment in the defense industry would give rise to technological innovation, which in turn would spark growth in the entire economy, and followed this by explaining that he had drawn up a defense procurement

budget of 440 billion rubles over three years, of which 20 percent was earmarked for research and development.

## **2. Seeking a Unique Diplomatic Style in East Asia**

### **(1) Changing Policies on East Asia and Energy Issues**

At the end of 2010 Russia possessed the world's largest reserves of natural resources, with an estimated 5.6 percent of the world's oil and 23.9 percent of its natural gas. Production volumes, too, were also among the largest in the world, at 12.9 percent of global production for oil and 18.4 percent for natural gas. In its *Energy Strategy to the Year 2030* (hereinafter, New Energy Strategy), revised in November 2009, the Russian government described the objectives of the national energy strategy as being to effectively utilize the country's vast reserves of natural resources to maintain economic growth and improve the quality of life of the people, while simultaneously raising the international standing of the Russian economy. From this explanation, we can infer that the Russian government's prime focus vis-à-vis its energy policies overseas is not merely to secure adequate profits from the energy exports, but to carve out a dominant position within the energy markets of the nations that buy energy from Russia.

In November 2009, when the New Energy Strategy was announced, the global energy market situation was not necessarily favorable to Russia. Crude oil prices had dropped, and Russia's oil exports had become less profitable. Moreover, amid growth in the world volume of LNG supply and moves to diversify their procurement sources on the part of European nations, which had always been the main consumers of Russian gas, the country was starting to lose its dominance in the European gas market. While Russia worked to maintain its position in European energy market, it was also forced to develop new export markets in East Asia in order to adapt to the changing environment. Under the New Energy Strategy, the country was committed to raising the share of energy resources exported to East Asia by the year 2030—from 6 percent for oil in 2009 to between 22 and 25 percent by 2030, and for gas from almost zero to between 19 and 20 percent. In other words, Russia's energy policy toward East Asia at the time of the emergence of the New Energy Strategy has been forced to react passively to the changing environment.

From the end of 2010 into 2011, however, a certain phenomenon caused a

major change in this market environment, namely, the so-called Arab Spring, which swept across the resources-rich countries of North Africa beginning at the end of 2010. This series of events not only pushed up international oil prices, they also caused European countries—which were seeking to increase their oil imports from North Africa nations as part of their policy of diversifying their procurement sources—to begin harboring fears about the oil production capacity of the Arab countries and therefore to reassess the importance of Russia as an oil exporter of long standing. In addition, prior to the Great East Japan Earthquake of March 11, many countries had been leaning toward increasing the proportion of primary energy supplied by nuclear power, but the nuclear power plant accident triggered by the earthquake and tsunami caused many to reconsider their position on this issue. This has led to higher expectations for the role of gas-fueled thermal power generation, at least as a stopgap measure for the time being. This has caused an accelerating growth in the global demand for gas, which has the advantage of being less harmful to the environment than most competing forms of energy. And as the possessor of the world's largest reserves of natural gas, Russia's presence in the global energy market has become greater. These changes in the environment have opened the way for Russia to adopt a more active policy toward East Asia in the energy field.

In December 2010 a branch line of the East Siberia-Pacific Ocean (ESPO) oil pipeline was completed to the city of Daqing in northeast China, and full-scale exports of oil to China via this pipeline were commenced in January 2011. Two months later in March, however, a dispute arose over the charges China was being asked to pay for the transport of oil through the pipelines involved, including those portions on Russian soil. The ESPO pipeline had originally come into being in February 2009 thanks to investment by China in the development of the oilfields in question and the oil production projects carried out there, but the Chinese side argued that the oil price agreed upon at that time was no longer realistic, and insisted on paying an amount calculated by themselves. This dispute was carried over into negotiations between the two governments, and in the end, an agreement was only reached after Prime Minister Putin visited China in October, at which time the Russian view prevailed. During the period when this dispute was ongoing, the two sides continued to examine project proposals such as joint Sino-Russian oilfield development projects aimed at expanding oil exports to China, the further expansion of the ESPO pipeline, and the establishment of joint-venture oil

refinery businesses within China. Some of these proposals have gone as far as actual negotiations between the companies involved.

Developments in the export of gas to the East Asian market have shown a close linkage with trends in the European market. As noted above, European demand for Russian gas can be expected to remain stable for some time to come, and the market environment saw a further improvement in November 2011 with the start of operations of the Nord Stream gas pipeline carrying gas to Germany, Russia's biggest customer for gas in Europe. The main reason why Germany had been investigating possibilities for the diversification of its gas supply sources was the risk that disputes between Russia and Ukraine or Belarus—countries through which, previously, gas pipelines had to pass to reach Central or Western Europe—might lead to supply disruptions. But the completion of the Nord Stream route, which runs along the Baltic seabed and thus bypasses these nations, has reduced the negotiating power of these intervening countries and greatly reduced the risk of supply disruptions. Because of this, Germany now has a less pressing need to find alternative suppliers to Russia, and the Germans are able to rely on Russian gas supplies with an easy mind. In fact, the gas capacity of the completed Nord Stream pipeline exceeded demand within Germany, and plans were drawn up to further transport some of the gas to other European countries. We can see from this that the pipeline has been designed to connect with other existing pipelines. To ensure sufficient production and exporting capacity in the future, the Russians have also begun full-fledged work on the Shtokman gas and condensate field development project (a new oilfield development in the Arctic) jointly with Western and Central European countries.

In these ways, Russia no longer has to concern itself so much over maintaining its dominance in the European market. The country's entry into the East Asian gas market is also less urgent, and this has given the Russians a breathing space in which to negotiate for optimum contractual conditions. They also have the leeway not only to consider economic interest, but also to take into account the political impact of such market participation. While the principal reason for the difficulties being encountered by gas export negotiations with China is the difference between the two sides on the issue of price, Russia now has less need to conclude an agreement quickly. At the Sino-Russian summit meeting in June 2011, the leaders failed to reach the agreement that had been expected, and the anticipated agreement also failed to materialize on Putin's visit to China in October. The year

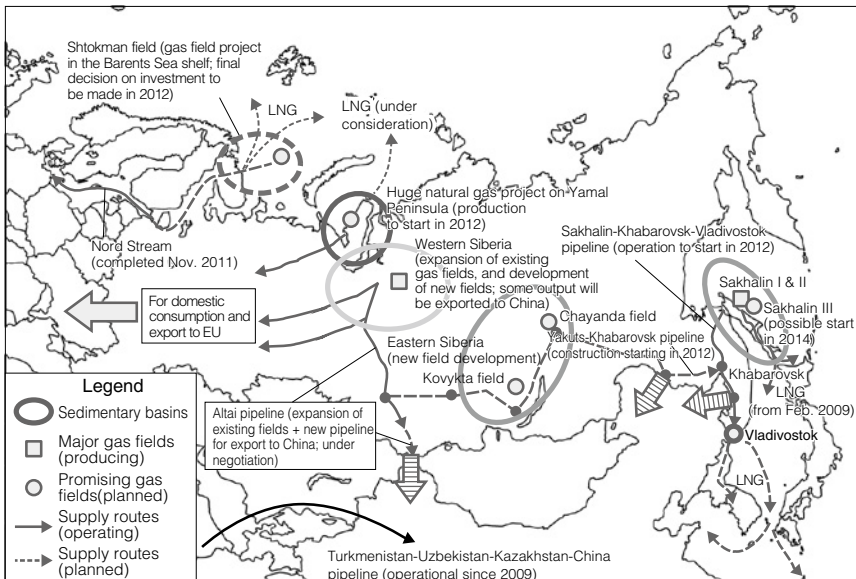
2011 ended without any accord between the two countries on this question, and the issue is still pending despite the scheduled start of exports in 2015. In the background to this situation is the undeveloped state of gas fields in Eastern Siberia and the fact that the huge initial investments required, including the laying of pipelines, means that a stable, long-term revenue must be forthcoming, i.e., Russia must be assured of steady, long-term demand before it can develop these gas fields. Looking at China from this perspective, the country began importing gas from Central Asia in 2009, and in September 2011 reached agreement with the Central Asian gas-producing nations to further expand the import volume. It is also taking steps to increase imports of LNG, and to boost domestic production. In view of these alternative sources of supply available to China, it is not necessarily certain that there is sufficient demand for gas imports from Russia to offset the costs.

Meanwhile, viewing the situation from a medium- to long-term standpoint, the East Asian market is important for Russia, and given the present environment, now seems a favorable time for Russia to establish a foothold in this market. The country's existing oil and gas developments in Sakhalin could serve as effective leverage for oil and gas field exploration and development elsewhere, and hence the focus of attention is now on those developments—Sakhalin Projects I and II. These development projects have been pursued by the Russian government since the 1990s, and production of oil commenced in 1999. Full-scale work on the development and production of natural gas was begun in 2007, and LNG exports, mainly to Japan, started in 2009. Production volume is still low, but as the reserves are promising, it should be possible to develop these oil and gas fields and to produce enough to increase exports, assuming stable demand and an adequate supply of capital. In September 2011 the Sakhalin-Khabarovsk-Vladivostok gas transmission system was completed to supply gas for domestic demand to Russia's Pacific maritime region. In collaboration with Japanese companies, work began in April 2011 on LNG exporting facilities in Vladivostok. Thus, work to expand the production and export of gas from the Sakhalin fields is currently underway.

Gas from the Sakhalin fields is being exported in LNG form not only to Japan but also to South Korea, where demand has been rising sharply. In August 2011, Kim Jong Il, chairman of the Defence Committee of the Democratic People's Republic of Korea—the supreme leader of North Korea—visited Russia and held talks with President Medvedev. At these talks, the two leaders agreed to discuss a

project for the construction of a gas pipeline from Vladivostok across North Korea to South Korea, and this plan attracted much media attention. In fact, however, this same plan had been under discussion between Moscow and Seoul since 2006. Joint research had been conducted from 2009 to compare the feasibility of meeting South Korea's rapidly growing demand for gas with LNG exports or exports by pipeline, leading to a report which concluded that the pipeline proposal was the more advantageous. Then, in August 2011, just prior to Kim Jong Il's visit to Russia, representatives of Gazprom, a partially state-owned gas company, visited South Korea and held talks with officials of the state-owned Korea Gas Corporation (Kogas) regarding the possibility of the supply of natural gas via a pipeline. Moreover, in September, following Kim Jong Il's visit to Russia, a roadmap for the establishment of a pipeline enterprise was agreed between Gazprom and Kogas in Moscow. The concept of a pipeline through North Korea naturally hinged on guarantees that Pyongyang would abide by the contract, but even assuming that, after laying the pipeline, the North Korean side stopped

**Figure 5.7. Gas production sites and supply routes for the East Asian market**



Source: Compiled from Gazprom website.



the flow of gas, as long as the alternative method of LNG exports by ship was available Russia and South Korea would be able to limit the damage to a minimum. In such an event, North Korea would be faced with a massive demand for compensation. In view of these factors, it is likely that the decision on laying the pipeline was left to North Korea.

It is possible that Russia's aims are still more far-reaching. If Russia can stimulate interest in and demand for its natural gas among the countries of East Asia and the Pacific Rim (where demand for LNG is seen certain to grow) by building Asia's largest LNG export terminal in Vladivostok, this would provide an incentive for investment in the development of the East Siberian gas fields, which is currently stagnating, and for the laying of pipelines. If this, in turn, acts as a stimulus for an increase in demand for Russian gas among the countries of East Asia and the Pacific Rim in the future, and if Russia could ensure the economic feasibility of the Shtokman gas field on the Arctic Ocean seabed and the Arctic Ocean Route (by which gas would be transported from the field to the markets of Asia and the Pacific Rim), these factors would act as an incentive for the gas field's development.

Russia's presence in the East Asian energy market is not necessarily significant, but the country is not bent on entering the East Asian market at the expense of abandoning the keynote of its energy strategy, which is to secure a dominating position in the export market. Rather, Russia is steadily laying down the groundwork for greater influence in the East Asian market while assessing trends in the international energy market. For this reason, the current international energy market environment, which underwent considerable changes from 2010 through 2011, constitutes an ideal situation in which Russia can consolidate its foothold in the East Asian market with a view to achieving a strong position in the future.

## **(2) Russian Military Becoming Increasingly Active in Vicinity of Japan**

Since President Medvedev's visit to Kunashiri Island in November 2011, there has been a cooling in political relations between Russia and Japan, principally with respect to the dispute over the Northern Territories issue. Cabinet-level Russian officials have paid inspection visits to the islands on a number of occasions, and a modernization plan has been drawn up for the Russian military

forces stationed on the islands. Furthermore, the Russian military has become more active in Japan's vicinity, with *Mistral*-class amphibious assault ships being deployed to the Russian Far East, and military aircraft repeatedly approaching Japan's territorial airspace.

From September 2, 2011, large-scale military exercises were held on the eastern side of the Kamchatka Peninsula and off the coast, with the participation of over 10,000 troops, over 50 warships and over 50 planes. In the summer of 2010, the "Vostok (East) 2010" military exercise was held in the Sea of Japan. This was the largest such exercise since the end of the Cold War, and was repeated in 2011 in a different area of the sea. These exercises mainly involved the Eastern Military District in Russia's Far East, and were comprehensive maneuvers participated in mainly by the Pacific Fleet and also by units of the Air Force, Army, and the Border Force. The Russian authorities state that the purpose of the exercises was to train the units involved in combating piracy, terrorism, and organized crime, and to practice the use of military force against ships as well as training in antisubmarine warfare, gun battles at sea, and amphibious assaults. The perceived value of Russia's Pacific Fleet has declined considerably since the end of the Cold War, but with the central role played by the fleet in these recent maneuvers, it is now attracting greater attention.

On September 8, two Tu-95 strategic bombers (capable of carrying nuclear weapons) flew unprecedentedly close to Japanese airspace, forcing fighter aircraft from Japan's Air Self-Defense Force to repeatedly scramble. Russia's resumption of long-distance practice flights outside the country's airspace, which had been terminated with the breakup of the Soviet Union, was announced by President Putin in 2007. Since then, the number of flights by Russian aircraft close to Japan's airspace has increased sharply, and in February 2008 Japan's airspace was violated for the first time in thirty-three years with the intrusion by Russian planes near the southern part of the Izu Islands. In the recent maneuvers, Russian planes flew an unprecedented route involving circling Japan one-and-a-half times (a continuous flight of fourteen hours) while carrying out mid-air refueling near a previously designated "flight danger zone" from northeastern Hokkaido to offshore of northern Kunashiri Island. Then, on September 9, twenty-four Russian naval vessels sailed through La Perouse Strait (Soya Strait in Japanese), which separates Hokkaido from Sakhalin, on their way to the military exercise site off the eastern coast of the Kamchatka Peninsula. This was the first time so many

ships had passed through this strait simultaneously.

Normally, when planning large-scale military exercises, the Russian Ministry of Defense issues prior notifications relating to preparations for such maneuvers through press releases or via its organ *Red Star*. This time, however, there was no prior notification. On September 2, which was designated in 2010 as the Anniversary of the End of World War II (in other words, the commemoration day for the victory over Japan), the ministry suddenly announced the holding of the exercises on its own website. Not all these military developments can be explained as directed against Japan, however. For example, after taking part in the maneuvers in the Sea of Okhotsk, the missile cruiser *Varyag* called at the Japanese port of Maizuru to take part in the twelfth round of joint search-and-rescue drills with the Japan Maritime Self-Defense Forces. Following this, the cruiser took part in joint exercises with the US Navy offshore of Guam, and then paid a goodwill visit to Canada before returning to its home port of Vladivostok.

Moreover, whereas under its previous *Military Doctrine*, Russia regarded all territorial claims by foreign countries as “military threats,” this phrase has been replaced with “military risks” in the most recent amendment of this document, indicating that Russia has downgraded its perception of threats. Almost no one in Russian military circles seriously believes that Japan would attempt to recover the Northern Territories by force, and it appears that the Russian side fully understands Japan’s defense policies, particularly its commitment to an exclusively defense-oriented stance. In spite of this, Russia has continued to take a hard-line stance toward Japan, as exemplified by President Medvedev’s visit to the disputed territories in November 2011. In the background to this was the upcoming elections. During the election campaign four years ago, too, the administration adopted an across-the-board confrontational stance toward Europe and the United States, and it is believed that this was intended to convince voters that Russia needed a strong leadership. Since then, however, US-Russian relations have got

back on track, and cooperation between Western countries and Russia for the purpose of modernizing the economy has made good progress. For this reason, the only feasible target for a show of strength at the moment is Japan.

At talks held between the foreign ministers of Japan and Russia on November 11, 2011, as part of the APEC Economic Leaders Meeting in Honolulu, Minister of Foreign Affairs Sergey Lavrov explained that his country's recent military exercises were not intended to provoke Japan, and proposed a closer relationship between the two nations' defense officials in order to avoid misunderstanding. On November 12, at summit talks between the two sides, President Medvedev stated that he hoped to achieve stronger Russo-Japanese collaboration in the field of national security. Russia is advocating three-way national security talks among Japan, the United States and Russia, and has revealed the desire to upgrade the Japan-US-Russia Trilateral Meeting on Security, which has already begun at the level of non-governmental experts, to the government level at some future date. The main reason why Russia is seeking the cooperation of Japan and the United States in national security matters, as explained below, is believed to be that its East Asian policy is currently undergoing a major change in response to the growing power and assertiveness of China. Many Russian specialists in the field of national security have expressed the view that cooperation with Japan, or with Japan and the United States, will be necessary to counter China's influence.

Looking beneath the surface of the recent increase in Russian military activity in the vicinity of Japan, we find a complex mix of domestic factors and the China-related factors that will be examined in depth in the following section. Having said that, there is a danger of the largely fabricated ostensible reasons for Russia's actions targeted against Japan accumulating into a sort of *fait accompli*, and that the threats being made against Japan may be irremediably incorporated into Russian military strategy. To achieve a positive breakthrough in Russo-Japanese relations, including the Northern Territories issue, we should not examine the two countries' relationship in isolation, but should examine Russian actions from the wider perspective of the East Asian situation as a whole. It is surely desirable for Japan, together with the United States, to actively persuade Russia of the strategic importance of strengthening its relationship with Japan in light of Russia's relations with China.

### **(3) Russia Crafts East Asia Strategy with an Eye on the Growing Power of China**

Sino-Russian relations are officially described as “at historically high levels,” but the high point of friendly relations is thought to have been around 2005, when both countries finally reached an agreement on demarcation of their mutual border and conducted joint military maneuvers. From the standpoint of the practical benefits of good relations with China, Russia’s exports of weapons to China have declined, and the two sides continue to haggle over the prices of resource exports. At the strategic level, too, as time goes on Russia is increasingly less motivated to pursue collaboration with China in restraining the power and influence of the United States. Rather, the question of how Russia is to treat its neighbor China, as one of a number of powers in a multipolar world, has become an important issue with regard to the country’s national security.

An examination of trends on the Russian military scene and moves to modernize the military indicates that they are proposing a new East Asian strategy whose main focus is on the rise of China. With regard to military reform, the establishment of the Eastern Military District at the end of 2010 was in order to expand the area of authority of the former Far Eastern Military District and centralize control over the entire Russo-Chinese border under this one military command. Moreover, with respect to nuclear forces, the Russians’ reluctance to reduce the levels of tactical nuclear warheads, and their positive stance on rebuilding their intermediate-range nuclear forces, among other factors, indicates the military’s concern with increasing its nuclear capability with respect to China in the future. The revised *Military Doctrine* issued in February 2010 recognizes that the probability of major military conflicts has declined, but also states that military dangers are on the rise on a number of fronts. Some analysts believe that this refers to China.

In addition, with the prospect of the opening up of the Northern Sea Route due to the shrinking of the Arctic icecap, analysts surmise that Russia fears the increasing appearance of Chinese naval vessels in the northern seas, including the Arctic. In October 2008, four Chinese warships, including a *Sovremenny*-class destroyer, passed through the Tsugaru Strait from the Sea of Japan into the Pacific for the first time ever, and this event is believed to have sent shockwaves through the Russian military. They are thought to be apprehensive that Chinese warships may at some future point pass through the La Perouse strait dividing Hokkaido

from Sakhalin, thus making an appearance in the Sea of Okhotsk, which Russia considers as being under its sovereignty and regards almost as an inland sea. The large-scale military exercise described above, conducted in September on the eastern side of Kamchatka Peninsula and off the coast there, may have been directed against possible future Chinese military activities. Furthermore, many military experts both inside and outside Russia suspect that the deployment in the Far East theater of *Mistral*-class assault ships bought from France, and the bolstering of Russia's military presence in the Southern Kurils, are aimed at containing China's ambitions in the region.

In this way, it can be seen that China is an important factor in the fashioning of Russia's national security policies. The missile cruiser *Varyag*, which took part in the exercises off the eastern coast of Kamchatka, subsequently conducted joint exercises with Japanese and US naval units, and this, too, can be explained as directed toward China. While political relations between Russia and China are ostensibly good, weapons exports from Russia to China have slumped, and the two sides remain at odds over energy prices. Moreover, the joint Russo-Chinese military exercise Peace Mission, which had been scheduled for the summer of 2011, was postponed. These factors indicate that underneath the surface, the Sino-Russian strategic partnership is becoming increasingly complex. Amid this

situation, on October 5, 2011 the Federal Security Service (FSB), which is in charge of internal security, suddenly revealed that an employee of China's Ministry of State Security had been arrested in October of the previous year on suspicion of attempting to illegally obtain technical information relating to the S-300 surface-to-air missile. Occurring as it did just prior to Prime Minister Putin's visit to China, this revelation by the Russian side of an espionage incident involving a Chinese national was unprecedented, and attracted considerable interest as a clear sign of the true state of Russo-Chinese relations.

Russia's distancing of itself from China has also made itself visible in the political stance

of the two countries in relation to the North Korea problem. Formerly, Russia's basic stance on North Korea, like that of China, was to defend North Korea's position, but as a result of the changes in the Russo-Chinese relationship, Russia has sought to establish an original position on issues relating to the Korean Peninsula. For example, in response to the sinking of the ROKS corvette *Cheonan* on March 26, 2010, an investigation into the causes of the sinking by an international group led by the South Koreans concluded that it was caused by a North Korean torpedo. Fearing that this would lead to a heightening of tensions on the Korean Peninsula, at the end of May Russia sent a group of four military experts to South Korea to conduct a separate investigation. China expressed opposition to any direct criticism of North Korea in a UN Security Council statement on this issue. Nevertheless, on December 13 Foreign Minister Sergey Lavrov criticized North Korea in talks with DPRK Foreign Minister Pak Ui Chun for its bombardment of Yeonpyong Island, its construction of new uranium enrichment facilities, and its development of nuclear warheads and missiles in contravention of a UN Security Council Resolution. This was the first time Russia has ever criticized North Korea in a public forum. Thereafter, Russia, which is a permanent member of the UN Security Council, called for an emergency meeting of the Security Council and took other steps to ease tensions on the Korean Peninsula, in contrast to the Chinese stance on this issue.

The year 2011 saw sudden moves toward a rapprochement between Russia and the DPRK. Firstly, in May, Director of the Service of the External Reconnaissance of Russian Federation (SVR) Mikhail Fradkov held talks with Kim Jong Il in Pyongyang, and in June Gazprom CEO Alexey Miller held talks in Moscow with Kim Yong Jae, DPRK ambassador to Russia, when they discussed the issue of laying a natural gas pipeline via North Korea to South Korea. Then, on August 24 Kim Jong Il paid a visit to Russia in a special high-security private train and held talks with President Medvedev at a military facility in the suburbs of the eastern Siberian city of Ulan-Ude. This was the first DPRK-Russia summit-level meeting in nine years. At the summit, in the field of political issues, Kim offered to resume participation in the Six-Party Talks without any preconditions, and stated his intention to freeze the development of missiles and nuclear weapons as well as nuclear tests and production of nuclear weapons-grade material, as a step toward resolution of this issue.

In the field of economic cooperation, too, the two leaders agreed to realize the

plan to lay a natural gas pipeline from Russia through North Korea to South Korea. Agreement was reached on creating a joint committee of DPRK and Russian gas company officials, which would oversee the concrete advancement of the project in close cooperation with South Korean state-owned gas companies. In addition, at virtually the same time as this summit, commanding officer of the Eastern Military District Vice-Admiral Konstantin Sidenko paid a visit to Pyongyang, where he reached agreement with DPRK officials on conducting joint search-and-rescue drills from 2012. It was also agreed that North Korean naval vessels would make goodwill visits to Vladivostok, opening up the way to the resumption of military cooperation between the two countries. Additionally, it was reported by the national newspaper *Izvestia* that North Korea's cumulative debt versus Russia had swollen to approximately \$11 billion, but that Russia had remitted 90 percent of this debt and indicated its intention to invest the remaining 10 percent in joint ventures within the DPRK. These moves toward the reestablishment of cordial relations between Russia and North Korea were, on the DPRK's part, the result of a desire to reduce its dependency on China. In response, on the Russian side, they resulted from attempts to find a uniquely Russian policy for dealing with Korean Peninsula issues. On both sides, the "China factor" loomed large.

Russia's East Asian diplomacy has not been limited to the bilateral relationship with China, and is spreading out to encompass multilateral relationships. Russia is expected to engage in multilateral diplomatic initiatives, for instance taking advantage of the APEC summit scheduled to be held in Vladivostok in September 2012, as well as such forums as the Shanghai Cooperation Organisation (SCO) and the Six-Party Talks, with the aim of expanding its influence over the region. Russia also officially participated in the 2011 East Asia Summit (EAS) for the first time, together with the United States. Existing members of the EAS, including the countries of Southeast Asia, are thought to have agreed to the simultaneous participation of Russia and the United States as part of their efforts to counter the dominant influence of China. While the linchpin of Russia's East Asian diplomatic efforts is the maintenance of strategic cooperation with China, on which Russia places great importance, from the opposite side, the principal countries of East Asia hope that Russia will play the role of a counterweight to China. Whether from the standpoint of a collaborator against China or as a counterbalance to Chinese power, Russia's diplomacy in East Asia contains certain inconsistencies, and is



constrained by definite limits. The EAS was held on the Indonesian island of Bali in November and addressed various issues including maritime security in the South China Sea. President Medvedev postponed his planned participation in the summit, and some observers believe that this was a political decision taken to avoid aggravating China's sense of isolation with respect to the South China Sea issue.

### **3. Russian Military Seeks Equipment Modernization and Improved Capabilities**

#### **(1) The Drafting of the *State Weapons Program for 2011-2020***

By December 2009 the Russian military had essentially completed the process of organizational reform, and the focus of attention shifted to the modernization of the military through the replacement and updating of equipment. At the end of December 2010 it was reported that the military had drawn up the *State Weapons Program for 2011-2020* (hereinafter the "New Weapons Program"). The main objective of this program is to transform the Russian military forces by raising the proportion of state-of-the-art weapons possessed by the military to 70 percent or higher by the year 2020, creating forces of a much higher quality than at present. For this purpose, under the New Weapons Program, more than twenty trillion rubles will be budgeted for the purchase of new military equipment up to 2020.

In March 2011 then First Deputy Minister of Defense Vladimir Popovkin (now head of the Russian Federal Space Agency), who was principally in charge of drafting the New Weapons Program, stated that this plan for modernization of the Russian military was based on three concepts. Firstly, although it was important to strengthen the defense industry, the need to supply the Russian military with state-of-the-art weapons took priority. Consequently, in cases where the Russian defense industry was not capable of producing a weapon or type of weapons required, the Defense Ministry would not rule out purchasing such weapons from abroad. Secondly, the Ministry put a high priority on weapons research and development. Approximately 10 percent of the funds earmarked for the New Weapons Program would be invested in R&D. Thirdly, priority will be given to the creation of a single information space, including from the General Staff to each individual soldier on the battlefield. In other words, the Defense Ministry has positioned as a high-priority task the improvement of the Russian military's capabilities in the field of information technology, where it lags behind and is thus

vulnerable. Chief of the General Staff Nikolay Makarov has indicated his awareness that the Russian military remains essentially in the same state as in the 1970s, and has fallen far behind the world's most advanced military forces. This is due to the fact that for twenty years following the fall of the Soviet Union the provision of advanced weapons and other equipment has been inadequate. In the field of procurement of military equipment, he has called for priority to be given to strategic nuclear forces, air defense forces, precision-guided weapons, space weapons, and the computerization of systems for the command and control of units and troops.

The following is an outline of the specific materiel procurement objectives under the New Weapons Program as clarified by First Deputy Minister of Defense Popovkin. Firstly, with regard to strategic nuclear forces, modernization is the No.1 priority, and will account for 10 percent of the total budget. The program aims to modernize all categories of strategic nuclear forces and strategic missile forces, in particular through the construction of eight *Borey*-class nuclear-powered ballistic missile submarines (SSBNs) and the deployment in them of Bulava submarine-launched ballistic missiles (SLBMs). Modernization programs will also be conducted on Tu-160 and Tu-95MS strategic bombers. Secondly, strategic defense forces are to be modernized. By 2018 modernization will be carried out on early-warning systems against potential missile attacks, including the construction of a continuous radar network covering the area around Russia. The S-400 surface-to-air missile system will be introduced, and development and procurement of the S-500 surface-to-air missile system will proceed. Thirdly, precision-guided weapons will be developed, and Russian forces will be equipped with them. This will include not only the Iskander-M short-range mobile theater ballistic missile system, but also precision-guided weapons for launching from naval vessels or from aircraft. The plans include the deployment of 10 Iskander-M missile brigades. The fourth objective is the modernization of the air fleet. By 2020 the Russian military plans to purchase over 600 new airplanes and over 1,000 helicopters. Among these will be the Su-34 and Su-35 fighter planes, Mi-26 transport helicopters, and Mi-8, Mi-28NM, and Ka-52 attack helicopters. Already, 100 helicopters were purchased in 2011. Finally, the fifth objective is the modernization of the Russian fleet, with plans for the purchase of approximately 100 ships of various kinds. These will include roughly twenty submarines (including the above-mentioned eight nuclear-powered submarines), thirty-five

corvettes, and fifteen frigates.

Initially, 30 percent of the total budget for the New Weapons Program was to have been disbursed over the first five years of the plan and the remaining 70 percent over the second five years. Subsequent to the drafting of this plan, however, the government came out with new decisions that allowed the Defense Ministry to conclude contracts worth an additional 700 billion rubles over the first five-year period. To enable them to meet these contractual requirements, the Russian defense contractors were able to take advantage of credit (or financing) arrangements with government assurance, and they did not have to repay these loans until the latter five-year period. Moreover, state companies referred to as Spetsremont and Spetsvoorudzenie were established within the Defense Ministry to handle maintenance, technical checks, and repair of weapons and military equipment, thus relieving the military units of the need to conduct such work themselves. All technical checks and repairs on weapons possessed by the armed forces in 2011 were scheduled to have been conducted by these special companies.

Although not mentioned in the outline of the New Weapons Program delineated by First Deputy Minister of Defense Popovkin, it goes without saying that the program also includes plans for the procurement of the latest weaponry for Russia's ground forces. According to Alexander Postnikov, commander in chief of ground forces, the introduction of an advanced telecommunications system and a computerized system for the command and control of units and troops is scheduled to begin in 2011. In addition, the delivery of the latest surface-to-air missiles to the air defense units of ground forces has already commenced. These missiles include the S-300V4, the Buk-M2 and the Tor-M2. Iskander-M missiles, among others, have already begun to be deployed to the missile units of ground forces and artillery units.

As announced in June 2011 at a session of the State Duma by Minister of Defense Anatoliy Serdyukov, a series of reforms is underway aimed at realizing a new-look Russian military capable of "network-centric warfare," and it is for this purpose that the New Weapons Program was drawn up. The defense minister also pointed out that the supply of new weaponry to the Russian military to enable them to successfully fight such modern wars poses new issues that must be addressed by the country's defense industry.

The Russian defense industry is beset by a large number of problems, including deficiencies in its scientific and technological base, and an insufficient number of

high-level specialists. For these reasons, some analysts have cast doubt on the feasibility of realizing the ambitious New Weapons Program. In July 2011 President Medvedev stated that, if the Russian military were dissatisfied with the weapons supplied by Russian defense contractors, the government might consider increasing its imports of foreign-made weapons. Behind this statement lies the government's dissatisfaction with the current situation, in which Russian-made weaponry is high-priced despite not necessarily being of the highest quality, and in which the contract awarding process lacks transparency. In the same month, Defense Minister Serdyukov revealed that about 18.5 percent of contracts for defense orders to be placed by the government in 2011 (worth 108 billion rubles) had still not been signed. He also revealed that this was due to sudden sharp price increases by Russian defense contractors. Among these, the minister was particularly scathing about the Moscow Institute of Thermal Technology (MIT), which produces the mobile version of the intercontinental ballistic missiles (ICBM) Topol-M and the Bulava SLBM. Apparently, MIT had suddenly added several billion rubles to the price of 1 Topol M missiles. To achieve the goals of the New Weapons Program, steps will have to be taken to improve the performance of the defense industry and introduce greater transparency into the management of the contractors. If adequate progress in reforming the defense industry is not achieved, the purchase of foreign weapons could well continue.

Procurement of weaponry for the military in 2011 under the New Weapons Program would include 36 strategic ballistic missiles, 20 strategic air-launched cruise missiles, 2 strategic nuclear submarines, 3 multipurpose nuclear submarines, 1 combat ship, 5 satellites, 35 airplanes, 109 helicopters, and 21 anti-aircraft missiles. Regarding the installation of the latest information and telecommunications system, which is important in realizing the computerization of troop command and control systems, 259 facilities were completed by early 2011, and the number of completed facilities is scheduled to reach 500 by the end of 2011. In this way, the New Weapons Program is being pursued vigorously right from the initial fiscal year.

The authorities have also indicated a policy of prioritizing the replacement of weapons possessed by military units stationed in the Far Eastern Federal District. In January 2011 Dmitry Bulgakov, Deputy Minister of Defense (in charge of armament and logistics) visited the disputed South Kuril Islands, following which Minister of Defense Anatoliy Serdyukov visited the islands in February. These

visits resulted in heightened awareness by the Defense Ministry of the need to replace the weaponry possessed by units in the Far Eastern district. Against this backdrop, at a meeting of the armed forces' command staff members in March, President Medvedev expressed his opinion of the vital importance of strengthening Russia's defense posture by modernizing the defense infrastructure in the Eastern and Far Eastern districts. It has been revealed that the two *Mistral*-class assault ships to be purchased from France are scheduled for deployment with the Pacific Fleet, and that the *Yuriy Dolgorukiy*, a *Borey*-class ballistic missile submarine (SSBN), will likely be deployed with the Pacific Fleet before long. Firing tests on the Bulava SLBM to be carried by the *Borey*-class submarines are reported to have been completed in December 2011, but deployment has not yet commenced.

Also worthy of attention is a report of plans to deploy the S-400 anti-aircraft missile system in the Far Eastern Federal District. Russia is currently planning to integrate its air defense system, missile defense system and early-warning system against a potential missile attack under the single strategic command of air-space defense forces, and the idea of deploying the S-400 missiles in the East Asian theater is part of this overall concept. In December 2010 President Medvedev instructed Prime Minister Putin and Defense Minister Serdyukov to realize this plan by December 1, 2011. As explained above, the high priority assigned in the New Weapons Program to strengthening strategic defense capabilities is linked to these developments. For the Russian leadership, the weakness of Russia's defenses against attacks by aircraft or missiles in the country's Far East compared with the European strategic front has been a cause of worry. In particular, the country's air defenses in the roughly 2,200-kilometer airspace lying between Khabarovsk and Irkutsk is notably weak, and this constitutes a serious problem. For this reason, some observers claim that, at the very minimum, two or three regiments equipped with the latest anti-aircraft and antimissile defense systems need to be deployed in this region.

## **(2) Increased Frequency of Military Exercises, and Strengthened Military Cooperation with Other Countries**

The Russian military have been carrying out more frequent military exercises of late. Over 2,000 exercises were conducted in 2010, an increase of 30 percent over the previous year, and approximately 3,000 exercises are scheduled in 2011. In the background of this steadily increasing number of exercises is believed to be

the desire to put military reform efforts to a practical test. In addition, the military hopes to expand Russian military influence through cooperation with the forces of other countries. It should be noted that Russians have been especially active in organizing increased exercises within the framework of the Collective Security Treaty Organization (CSTO), which is of particular importance to the Russian military authorities within the overall framework of military cooperation. Another point to note is that military exercises in the East Asian region have been held with growing frequency, which is thought to reflect the importance placed by the Russian leadership on strengthening their defense posture in this region. It is probable that these moves are motivated largely by the Russian leadership's concern over China's growing military power.

A series of military exercises was held between June and October 2011 with the objective of strengthening military cooperation within the framework of the CSTO. Firstly, in June the joint operational and tactical exercise "Shygys (East) 2011" was conducted in Kazakhstan. The purpose of this exercise was to test the armed forces ability to conduct joint stabilization operations in the event of a military conflict. Then, in July the joint exercise "Boevoe Sodruzhestvo (Fighting Cooperation) 2011" was conducted at the Ashuluk training area in Russia's Astrakhan region by participants in the integrated air defense system of the Commonwealth of Independent States (CIS). Participating units included anti-aircraft units from Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Tajikistan.

Following this, from September through October Russian and Belarusian forces took part in two large-scale coordinated exercises—the joint operation exercise "Shchit Soyuz (Shield of Alliance) 2011," and the operation and strategic exercise "Tsentr (Center) 2011" held in the Central Military District and in Central Asia. In March 2011 President Medvedev had already brought up Center 2011, the largest exercise scheduled within 2011, for discussion at the meeting of the armed forces' command staff members, when he had insisted that the effectiveness of the new three-level command structure—"military district (joint strategic command), operational command, and brigade"—must be thoroughly tested and perfected. Moreover, as these exercises were carried out in collaboration with Belarus, which is a member of the CSTO, President Medvedev requested that they be used to verify the effectiveness of regional security arrangements—specifically, to verify the ability of the three Russian armed services to liaison effectively with one another and realize effective liaison with

allied forces at the operational level. Firstly, the Shield of Alliance 2011 exercise, which commenced on September 16 at the Ashuluk training area, was based on a scenario in which air defense units of Russia and Belarus (both CIS members), in cooperation with ground forces, repel an aerial attack carried out within the airspace of the two countries by an imaginary enemy. The Russian and Belarusian militaries form a unified regional air defense system, and the exercise was conducted to verify the effectiveness of this system. Over thirty air defense units took part in the exercise, employing S-400 antiaircraft missiles, Su-34 fighter-bombers, and Ka-52 attack helicopters.

In the Center 2011 exercise, which commenced on September 19, the six participants were all members of the CSTO, i.e., Russia, Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Tajikistan. Approximately 12,000 troops took part, and the equipment employed included roughly 1,000 pieces of ground-based weaponry (tanks, armored cars, surface-to-air missiles, etc.), 70 aircraft, and 10 ships. Units from the Ministry of Internal Affairs, the Federal Security Service, and the Emergency Ministry also took part and these large-scale exercises were conducted into October at a total of seven locations in Russia, Kazakhstan, Kyrgyzstan, and Tajikistan. On September 22 joint maneuvers were performed with the above-mentioned Shield of Alliance 2011 exercise. According to Vladimir Chirkin, Commander of the Central Military District, the objective of Center 2011 was to prepare the participating countries' forces to deal with the "Threat from the South," i.e., the possibility of a military conflict occurring in Central Asia as a result of the expansion of terrorist activities by Islamic extremists, which is regarded as one of the most serious threats faced by nation states today. While testing the results of the reforms carried out in the Russian military, which is seeking a "new look," the exercise was also intended to improve the ability of the CSTO's rapid reaction force and reactive operations force to effectively deal with such a military conflict. More specifically, the exercise was intended to form a unified understanding and approach by CSTO members regarding the roles of the rapid reaction force and reactive operations force and the ways in which these forces should be used, and to improve the capabilities of commanding officers and staff in handling the transition from peacetime posture to wartime posture as well as in planning special operations. On September 27, President Medvedev, after observing the Center 2011 exercise at the Chebarkul training area in the Chelyabinsk region, stated that he had been able to confirm the ability of units

from various different branches of the armed forces to effectively liaise and operate together, and that the exercise had shown the improvements realized in the forces' preparedness for action and their proficiency in the use of the new weaponry that had been deployed.

The series of military exercises conducted by Russia in 2011 was focused on strengthening military cooperation within the framework of the CSTO, but the members of the CSTO do not necessarily possess a single unified vision of the organization's purpose. It can be inferred that Uzbekistan's failure to take part in these exercises was intended to send a negative signal regarding the country's attitude to the strengthening of the CSTO rapid reaction force and reactive operations force. This is because the Uzbekistan government fears that this kind of strengthening of the military could lead to increased interference in the internal affairs of CSTO members. As shown by the riots in Kyrgyzstan in 2010, CSTO countries face serious internal threats, and the alliance's inability to deal with these threats is a major weakness. Consequently, how to overcome this kind of weakness is a major topic for discussion. At an informal summit meeting of CSTO heads of state in August 2011, a new draft agreement was discussed that would enable CSTO members nations to more effectively and rapidly take action in the event that subversive elements within a CSTO member nation attempted to overthrow the nation's constitutional system with the result that large numbers of ordinary citizens became victims. According to CSTO Secretary General Nikolay Bordyuzha, these discussions are not intended to effect a reform of the CSTO, but merely to amend the large number of existing documents so as to conform more appropriately to the present situation.

An increase has also been observed in military exercises in the Russian Far East. While this is part of the overall increase in such activity by the Russian military, it also stems from the leadership's intention to put priority on improving the capabilities of the forces stationed in the Far East region. In an interview conducted in February 2011, Deputy Minister of Defense Nikolay Pankov stated that the Russian military authorities had an extremely high level of interest in the units stationed in the Far East region. In April 2011 exercises were held by marines from the Pacific Fleet in the Khasan area of Primorskiy Krai on Russia's Pacific coast. Also participating were air force units, antiaircraft units, and airborne assault troops under the command of the Eastern Military District.

As described above, in September a large-scale command staff exercise was



conducted, mainly by the Pacific Fleet, over an area stretching from the Sea of Okhotsk to the Pacific coast of the Kamchatka Peninsula. Taking part in this exercise were marines as well as the guided missile cruiser *Varyag*, the antisubmarine destroyers *Admiral Tributs* and *Admiral Panteleyev*, and air assault troops, all attached to the Pacific Fleet. They confirmed the ability of the fleet to carry out operations at sea while liaising with military units under the command of the Eastern Military District, and also confirmed the effectiveness of liaison with other military services and with units of other government branches. Then, in October a command staff exercise was carried out by the Eastern Military District in the Amur region. This exercise was conducted by joint units of the three services, as well as anti-aircraft units and air force units, among others. It was based on a scenario in which a military conflict was unfolding, and was intended to test the Eastern Military District's command capabilities at the operational and tactical levels.

### **(3) Expanding Arms Exports, and Stronger International Military/Technological Cooperation**

The value of Russian arms exports has grown by an average of 700 million US dollars per year since 2000, and in 2010 the annual figure rose by around one billion dollars over the previous year, to exceed ten billion dollars. According to Mikhail Dmitriyev, head of the Federal Service for Military-Technical Cooperation, the value of the order backlog currently held by the Russian defense industry has reached forty-eight billion dollars. While India and China remain among the most important buyers of Russian weapons, exports to countries in Southeast Asia, the Middle East, North Africa, and South America are growing, and this trend is pushing up the total value of weapons exports as well as expanding the number of countries with which Russia is engaging in military and technological cooperation. As of 2010, the number of Russia's military and technological cooperation partner nations had reached seventy.

At present, Russia's biggest customer is India, and the two countries are currently pursuing major joint development projects involving a supersonic cruise missile, a fifth-generation fighter jet, and a multipurpose military transport plane. According to Dmitriyev, these joint projects are making the strategic partnership between Russia and India increasingly important. India is becoming increasingly important as a customer for Russian weapons exports, while the importance of

China is decreasing. Regarding this point, Dmitriyev says that this is because a growing percentage of the weapons required by the Chinese military are being produced by the Chinese themselves. He pointed out that the two countries continue to cooperate in the military and technology fields, and that one of the issues Russia must address is how to protect its intellectual property in the field of military technology in the event of continued military and technological cooperation with China. Russia currently faces problems regarding intellectual property rights in the fields of military technology not only with China, but also with other former members of the Warsaw Pact, i.e., the Czech Republic, Slovakia, Poland, and Bulgaria. Russia is holding talks with these countries aimed at producing agreements over military technology licenses.

Interest is focusing on the impact on Russian arms exports of the political turmoil currently sweeping across the countries of the Middle East and North Africa, and encompassing the fall of a number of governments in these regions. This is because nations such as Algeria, Libya, and Syria have become important buyers of Russian weapons. Libya has concluded arms procurement contracts worth approximately four billion dollars, and the continuance of political turmoil in that country could have a negative effect on the export of expensive weaponry. In such an event, Russia would probably be forced to reconsider its future arms export options in the Middle East and North Africa.

The contract for the purchase of two *Mistral*-class amphibious assault ships from France was signed by Prime Minister Putin on the occasion of his visit to France in June 2011, and a further contract for the construction of two more such ships at Russian shipyards is scheduled to be signed by the end of 2011. This contract will be worth 1.2 billion euros, and according to French Prime Minister Francois Fillon, the conclusion of such a high-priced contract between Russia and a member of NATO is symbolic of the recognition by both nations that the Cold War is well and truly over. Whether Russia continues to make such purchases of military equipment from other countries is likely to depend on the ability of the Russian defense industry to produce state-of-the-art equipment. If we examine President's Medvedev's statement in July 2011, in which he hints at the policy regarding the purchase of foreign weapons to be laid out in the New Weapons Program and suggests that procurement of weapons from overseas will expand, we see that the purchase of foreign weapons is becoming an important option. However, in the background to this policy and the president's statement is not only

the desire to provide the military with high-quality equipment, but also the determination of the Russian leadership to promote the reform of Russian defense contractors and strengthen the domestic defense industry over the long term.

**Table 5.1. Principal Russian arms exports in 2011**

Purchasing Country	Details
India	Completed overhaul of approx. 60 MiG-29 fighter jets (2008 contract portion) Contract negotiations for sale of approx. 200 Ka-226 utility helicopters (total value US\$750 million)
China	Delivery of 25 <i>Tigl</i> armored cars
Brazil	Contract for delivery of Ka-32 A11BC utility helicopters (number and other details unknown) Contract negotiations for sale of 150 Mi-34S1 light helicopters Delivery of six Mi-35 attack helicopters postponed (scheduled for delivery in 2011 under 2008 contract)
Venezuela	Agreement on provision of US\$4 billion credit for purchase of Russian weapons
Jordan	Agreement on joint production of “Hasim” RPGs Delivery of two IL-76MF military transport planes
Syria	Delivery of two Bastion mobile coastal defense missile systems (fitted with 36 Yakhont cruise missiles; 2007 contract valued at approx. US\$300 million)
Algeria	Contract for delivery of two <i>Tigl</i> -class corvettes Contract negotiations for one division’s worth of S-300 antiaircraft missiles (follow-up to one division’s worth delivered in 2008)
Libya	Large-scale delivery contract signed for 20 Su-35s, Ka-52 attack helicopters (number unknown), two S-300PMU2 antiaircraft missiles, and 36 Pantsir-S1 antiaircraft missiles, at a value of approx. US\$4 billion
Malaysia	Contract negotiations for 18 Su-30MKM jet fighters (new contract, follow-up to completed delivery of 18 planes)
Sri Lanka	Agreement on construction of service center for repair and maintenance of Soviet-made and Russian-made weapons possessed by Sri Lankan forces

Source: Compiled from a variety of sources.

## **Russia Puts Effort into the Development of Outer Space**

With the retirement of NASA's Space Shuttle in July 2011, Russia's Soyuz spacecraft took on sole responsibility for ferrying astronauts to and from the International Space Station. In 2011, exactly half a century after Yuri Gagarin became the first human being to journey into outer space in 1961, Russia is putting efforts into reviving its capabilities in the field of space development, in which it had formerly been very active. Space development is one of the few fields in which Russia is internationally competitive, and the authorities have positioned it as a strategic industry with the twin goals of ending Russia's dependency on natural resources and modernizing the economy. At the end of April 2011 Prime Minister Putin, addressing a meeting of experts in the fields of science and technology, stated that the government placed equal priority on space development and the defense industry, and that the fiscal 2011 budget appropriation for space development would be increased by approximately 30 percent over the previous year, to 153 billion rubles. The star item in Russia's space development program is the resumption of the Mars exploration program, which had been terminated. Since June 2010, long-lasting simulation tests under the name "Mars 500" have been carried out to prepare for a possible manned Mars mission, with astronauts spending about 500 days in conditions simulating a spacecraft, a Mars Lander, and the surface of the Red Planet, enabling researchers to analyze the psychological effects that astronauts would be likely to endure in a Mars mission lasting many months.

The Russians also plan to enhance their ability to construct Soyuz spacecraft and to resume commercial space travel, which had been discontinued. Under the space development program drawn up by the Russian government, the country will expand its share of international manned and unmanned space flights, and in addition to developing a next-generation manned spacecraft, will construct the Vostochny (Eastern) Cosmodrome in the Amur region of the Russian Far East to enable them to reduce their dependency on the Baikonur Cosmodrome in Kazakhstan. This will relieve Russia of the necessity of paying a large rent to Kazakhstan for Baikonur, and there will be no restrictions on the use of the new cosmodrome for military purposes. The first rocket is scheduled to be launched from Vostochny Cosmodrome in 2015, and the construction of the facility is expected to help stimulate the economy of the Russian Far East and kick-start cooperation in the space development field with East Asian nations.

Space development by Russia—best exemplified by the development of rockets—has been carried out jointly by the military and civilian sectors since the Soviet era, and there is a close relationship between space development and modernization of the military. The head of the Federal Space Agency (Roscosmos), which oversees civilian space development efforts, has usually been a former commander of the military's space arm, and military personnel account for over half of all the officials of Roscosmos. Vladimir Popovkin, who assumed the post of general director of the Federal Space Agency at the end of April 2011, is similarly a former commander of the military's space arm, and as

first deputy minister of defense with responsibility for materiel procurement, he has worked to modernize the military. Three of the essential elements in the modernization of the armed forces—strategic nuclear weapons, precision-guided weapons, and computerized command and communications systems—are intimately connected with launching rockets and putting reconnaissance satellites into orbit. The GLONASS satellite navigation system, an alternative to the United States' Global Positioning System (GPS) is used as a military information processing system to guide precision-guided weapons and even ICBMs. It can be regarded as the “brain” of the Russian military's materiel, and as the key to the modernization of the country's armed forces.

