

MILITARY COOPERATION BETWEEN RUSSIA AND SOUTH KOREA

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After South Korea opened diplomatic relations with the Soviet Union in September 1990, bilateral relations extended into the military field. By the end of the 1990s, Moscow emerged as Seoul's second most important military partner after the U.S. This paper explores Seoul-Moscow military relations in 1992-1999, focusing on their recent developments, Russia's arms sales and military-related technology transfer to South Korea, and limitations to Seoul-Moscow military cooperation. Large-scale Russian arms sales to South Korea are problematic since the bulk of South Korea's military hardware and equipment are U.S.-made and Russian armaments may be incompatible with South Korea's existing weapons systems. But still promising are the prospects for joint research and development of high-weapons and military components for domestic consumption and exports.

I. Introduction

Since the end of the Korean War, the ROK-US Mutual Defense Treaty of 1954 has served as the cornerstone of bilateral relations

between the two nations. The treaty came about because the ROK (Republic of Korea or South Korea) sought and gained military protection from the U.S. after being confronted with incessant military threats from the DPRK (Democratic People's Republic of Korea or North Korea). During its crusade against the Soviet Empire, the U.S. found a loyal, anti-Communist ally in South Korea. At the end of the Cold War, South Korea opened diplomatic relations with the Soviet Union in September 1990; soon thereafter Soviet/Russian-South Korean relations extended into the military field. The end of the Cold War and the establishment of a formal diplomatic relationship between Seoul and Moscow fostered conditions necessary for the two countries to initiate military cooperation. By the end of the 1990s, Moscow emerged as Seoul's second most important military partner after the U.S.

Russia has pursued four interrelated goals vis-à-vis Seoul: (1) to develop Siberia and the Far East with economic cooperation and aid from Seoul; (2) to cultivate close political and military ties with Seoul in order to diversify its diplomatic ties and enhance its power position in Northeast Asia; (3) to muster Seoul's support for its proposal for a collective security system in the Asia Pacific region; and (4) to be recognized as a full-fledged member of the Asia Pacific community and to incorporate its economy into the dynamic process of that community with the help of South Korea. This paper explores Seoul-Moscow military relations in 1992-1999, focusing on their recent developments, Russia's arms sales and military-related technology transfer to South Korea, and limitations to Seoul-Moscow military cooperation. By way of conclusion, the authors offer some practical suggestions for policy-makers.

II. Recent Developments in Seoul-Moscow Military Cooperation

In his first years as Russian President, Boris Yeltsin favored Seoul at

the expense of Pyongyang. Russia continued to strengthen its ties with Seoul and kept North Korea at arm's length. Yeltsin considered the communist North Korea a detestable regime and did not want a relationship with it. Consequently, Seoul-Moscow relations matured into a cooperative partnership, while Moscow-Pyongyang relations continued to degenerate. However, Russia concluded that it needed to maintain a balanced relationship with the two Koreas to maximize its influence and prestige in the Korean peninsula and Northeast Asia. By late 1994, Moscow had discarded its lopsided, pro-Seoul policy and made efforts to restore a relationship with Pyongyang. Moscow-Pyongyang rapprochement began in earnest after Yevgenii Primakov replaced Andrei Kozyrev as Russian Foreign Minister in January 1996. In March 1999, representatives of Russia and North Korea initialed a new basic treaty that would replace the 1961 mutual assistance treaty. Still, Moscow-Pyongyang relations are developing at a snail's pace, while Moscow-Seoul relations remain robust.¹

As bilateral political relations matured, Seoul-Moscow military cooperation has evolved in three stages in 1990-1999: (1) in search of military cooperation (1990-1991); (2) building mutual confidence through military exchanges (1992-1996); and (3) military cooperation gaining momentum (late 1996 - present).

In Search of Military Cooperation: 1990-1991

Military cooperation² between Seoul and Moscow began in the Soviet era. After establishing a diplomatic relationship on September 30, 1990, the USSR and the ROK considered establishing military coop-

1 For an overview of Russia-South Korean relations, see Seung-Ho Joo, "Russia and Korea," in Bae Ho Hahn and Chae-Jin Lee (eds.), *The Korean Peninsula and the Major Powers* (Seoul: The Sejong Institute, 1998), pp. 69-114.

2 In this paper, the authors use the term "military cooperation" in a broad sense that includes inter-state activities such as transfer of arms sale, technology transfer, personnel contacts, exchange visits, military education, and even military alliance.

eration. South Korea was reluctant to engage in military cooperation with the Soviet Union. In fact, the Roh Tae Woo government displayed extreme caution towards Soviet President Mikhail Gorbachev's unexpected suggestion of a treaty on basic relations, believing the Soviet draft of the proposed treaty might include military contents. Gorbachev raised the possibility during the summit in April 1991. After all, the Soviet Union, the leader of the communist bloc, was still maintaining a military alliance with North Korea. Seoul did not wish to jeopardize the U.S.-ROK military alliance by rushing into military ties with Moscow. At the time, it was unthinkable for Koreans to enter into military cooperation with a communist country.

Still, military relations between the two countries began via exchange/ visits between senior military officers and South Korea's participation in the Soviet Union's defense industry conversion. In 1991, the Soviet Union sent a military attache to its embassy in Seoul, and in October 1991, South Korea followed suit. Through the military attache offices, Seoul and Moscow began military relations. In late October-early November 1991, for the first time, senior military officers visited each other's capitals to discuss bilateral military cooperation. Lt. Gen. Yong Yong-Il, chief of the ROK National Defense Ministry Intelligence Directorate, arrived in Moscow in late October to attend a ceremony marking the dispatch of the military attache to the Korean embassy in Moscow.³ During the two-week-long visit, he met with Soviet Defense Minister Yevgeni Shaposhnikov. Coinciding with Gen. Yong's trip, the commander of the Soviet Far Eastern Military District, Lt. Gen. Viktor Novozhilov, came to Seoul on November 4 to participate in a two-day seminar on Asia-Pacific security problems.

The Kremlin requested that South Korean companies participate in its efforts towards defense industry conversion. The Soviet government suggested 69 areas in which Korean companies could participate

3 *Yonhap*, November 6, 1991, in FBIS-EAS-91-217, p. 28; *The Korea Herald*, November 5, 1991, p. 3, in FBIS-EAS-91-214, November 5, 1991, p. 14.

on a joint venture basis. These included explosives, medical machinery and equipment, radar and satellite communication facilities, optical equipment, automobile engines, and aircraft and light helicopters. It also offered to sell a total of 24 products and technology, including explosives, laser technology, and rocket-firing facilities.⁴

Some of these items have military applications and revealed the Soviet government's interest in selling armaments and military technology. In early 1991, the Soviet government offered through unofficial channels to sell weapons to Seoul and to use the revenues from the sale to purchase Korean-made light industry products. The listed items included the MiG-29B, SU-25, S-200 (SA-5 Gammon) air defense missile system, BM-21 Grad 122mm, and BM-27 220mm multiple barrel rocket launchers. In mid-1991, the Soviet Union offered the S-300PMU1 and the TOR air defense missile systems for licensed co-production by a consortium of South Korean companies.⁵ Furthermore, Moscow was willing to sell military technology related to the production of fighter aircraft. Despite these offers, military cooperation between Seoul and Moscow remained scarce and negligible.

Building Mutual Confidence through Military Exchanges: 1992-1996

With the implosion of the Soviet Union at the end of 1991, the Russian Federation became its legal successor. It should be noted that Moscow continues to tilt to Seoul at the expense of Pyongyang, and Russia has vigorously pursued military cooperation with South Korea and considers it (or a unified Korea) a potential ally.⁶ This desire has been clear since 1991. In 1992, Hong Soon-Young, then South Korean

4 *Yonhap*, November 20, 1991, in FBIS-EAS-91-225, p. 14.

5 Edmond Dantes, "Changing Air Power Doctrines of Regional Military Powers," *Asian Defence Journal*, March 1993, p. 44; *Kukmin Ilbo*, April 4, 1991, p. 1, in FBIS-EAS-91-067, April 8, 1991, p. 38.

6 *Chosun Ilbo*, March 12, 1992.

ambassador to Moscow, observed the following: "Russia is more forward [about a military relationship] than we are, meaning it wants more than partnership relations."⁷ Russian Ambassador to Seoul Aleksandr Panov, in a news conference in Seoul in June 1992, stated that Seoul and Moscow could gradually increase bilateral military cooperation based on exchanges and contacts among military officials.⁸ During his trip to Seoul in March 1992, Russian Foreign Minister Andrei Kozyrev revealed that Russia was considering the inclusion of a clause in the new treaty on basic relations on "mutual consultation and cooperation when the two countries feel they are in danger." He further stated that Russia was ready to seek exchanges with South Korea in the military field.⁹

The first step towards Moscow-Seoul military cooperation was to build mutual confidence and understanding between their militaries. The two militaries had long considered each other as enemies and knew so little about each other. It was expected that they would develop an amicable and cooperative relationship through frequent personnel exchanges and contacts. Military exchanges contributed to mutual confidence and eventually facilitated bilateral military cooperation between Seoul and Moscow in such fields as intelligence sharing, arms sale, and military technology transfer.

The first summit meeting between Russia and South Korea took place on November 18-20, 1992, in Seoul. At the time, Presidents Roh Tae Woo and Boris Yeltsin signed the treaty on basic relations that laid the legal foundations for closer bilateral economic, political, scientific, and cultural cooperation. The basic treaty repudiated the use of force in settling disputes and committed the two countries to pursuing the common values of freedom, democracy, respect for human

7 *Yonhap*, March 11, 1992, in FBIS-EAS-92-048, March 11, 1992, p. 29.

8 *Yonhap*, June 17, 1992, in FBIS-EAS-92-117, June 17, 1992, p. 13. Panov succeeded Oleg Sokolov to become the second Russian ambassador to Seoul.

9 *Yonhap*, March 19, 1992, in FBIS-EAS-92-055, p. 7.

rights, and market economy.¹⁰ The basic treaty did not contain any military cooperation clauses. The joint Russian-Korean statement issued at the end of the summit did not include mention of bilateral military cooperation.

During Yeltsin's visit, Russian Defense Minister Pavel Grachev and his Korean counterpart Choi Se-chang signed a memorandum of understanding (MOU) for military exchanges for 1993-1994. The MOU was the first document outlining military cooperation between the ROK and Russia and has served as the basis for bilateral military cooperation. The MOU covered exchange visits of the defense ministers or chairmen of the joint chiefs of staff and other military personnel, warships, and the Korean Defense Ministry delegations, and Russian Military College delegations.¹¹ Through the MOU, the defense ministries of the two countries established direct contacts and exchanges.

In accordance with the MOU, Seoul and Moscow implemented exchange visits and military contacts. A squadron of the Russian Pacific Fleet consisting of the cruiser Admiral Panteleev, destroyer Bystryi, and tanker Pechenga arrived on Aug 31, 1993, in Pusan for a friendly visit. In early September, South Korean naval ships (frigates Ching Nam and Ul San) arrived in Vladivostok for a friendly visit. In June 1993, a South Korean military delegation arrived in Russia to visit the Russian ministry of defense and educational institutions. The following month, a Russian military delegation led by Col. Gen. Boris Petrovich, First Vice President of the Russian Military General Staff

10 During the Cheju summit in April 1991, President Gorbachev of the USSR and President Roh of South Korea agreed in principle to conclude a treaty on basic relations. After the dissolution of the USSR, the Russian Federation and South Korea continued working on the basic treaty. For the full text of the Basic Treaty, see *The Korea Herald*, November 20, 1992. For the joint statement by Presidents Roh and Yeltsin, see *The Korea Herald*, November 21, 1992.

11 The memorandum consisted of a preamble and six articles. It would take effect in January 1993. *Yonhap*, November 20, 1992, in FBIS-EAS-92-225, November 20, 1992, p. 11; ITAR-TASS, November 20, 1992, in FBIS-SOV-92-225, November 20, 1992, p. 12.

College, came to Seoul to observe the major military education and training system.¹² Gen. Lee Yang-Ho, chairman of the ROK Joint Chiefs of Staff, visited Russia on September 5-12, 1993, and met with Russian Defense Ministry Pavel Grachev. At the meeting, the two sides agreed to have joint naval exercises in 1997. In 1993, for the first time a Russian military officer (the Russian military attache at the Russian embassy in Seoul) was allowed to observe the Team Spirit U.S.-ROK joint military exercise. In November 1994, eight ROK military officers were sent to the Russian General Staff College on a two-year educational program to acquire Russian language skills and study the Russian military system and strategy.¹³

In May 1995, Russian Defense Minister Pavel Grachev made a second visit to Seoul, leading a Russian military delegation. This visit indicated that the defense ministers of the two countries were making regular contacts with one another.¹⁴ A Korean Defense Ministry official revealed, "The Defense Ministry [of the ROK] has prepared for the Grachev meeting more in earnest than for the annual Korea-U.S. Security Consultative Meeting (SCM)."¹⁵ This fact was a clear sign that the ROK was considering Russia as a serious military partner. Grachev and his South Korean counterpart Lee Yang Ho signed a Memorandum of Understanding for Military Exchanges. This MOU included an agreement to exchange experts and personnel and an agreement to exchange military intelligence.¹⁶ In addition, the defense ministers ini-

12 *The Korea Times*, July 3, 1993, p. 3.

13 As of late 1994, Korean military personnel were undergoing military education in 38 countries. *Chosun Ilbo*, November 7, 1994.

14 Since Russia wishes to renew the Memorandum of Understanding between the defense ministries of the ROK and Russia every two years, the defense ministerial meeting may take place regularly in the future. By contrast, the defense ministers of the ROK and the U.S. meet regularly through the annual Security Consultative Meeting to coordinate their joint military posture.

15 *The Korea Times*, May 20, 1995, p. 3, in FBIS-EAS-95-098, May 20, 1995.

16 Oh Young Jin, "Russian Scraps Automatic Support for NK," *The Korea Times*, May 20, 1995, p. 1.

tialed an agreement on military-technical cooperation,¹⁷ opening the door to Russian arms sales to South Korea. During his visit, Grachev reconfirmed Russia's interest in a collective security system in Northeast Asia by proposing the creation of a sub-regional security system in the region.

Military Cooperation Gaining Momentum: late 1996-present

By late 1996, Moscow-Seoul military relations were moving to a higher level. Whereas previous MOUs between the two militaries were designed primarily to enhance mutual understanding and trust through personnel exchanges and visits, military agreements in 1996 and thereafter focused on bilateral military cooperation in practical matters. This changing focus clearly indicated that bilateral military relations between Seoul and Moscow were stable and mature.

In November 1996, South Korean Defense Minister Kim Dong Jin and Russian Defense Minister Igor Rodianov signed a Memorandum of Understanding for Military Cooperation. The MOU called for bilateral cooperation in training troops and army surgeons and in educating military personnel on weapons operation and other equipment.¹⁸ By signing the MOU for military cooperation, both sides laid the foundation for comprehensive and far-reaching military cooperation. In November 1997, South Korea and Russia signed an agree-

17 In Russian usage, the phrase "military technological cooperation" refers primarily to the transfer of arms and related technologies. It also includes education of foreign cadets in military schools, military advice and expertise, construction of military installations, and mutual research and development in related area. See Petr Litavrin, "Military Technical Cooperation: New Image of an Old Business," *The Monitor: Nonproliferation, Demilitarization, and Arms Control*, Vol. 4, No. 2-3 (Spring-Summer 1998), p. 43.

18 The memorandum became effective as soon as it was signed. It would remain in effect for five years and thereafter will be renewed automatically. "Defense Ministers Sign Memorandum of Understanding in Moscow," *The Korea Times*, November 5, 1996, p. 1.

ment to enhance bilateral cooperation in their respective defense ministries. The agreement, signed by Vice Defense Minister Lee Jung Rin and Lee's Russian counterpart Nikolai Mikhailov in Moscow, called for mutual assistance in technology transfer and information on the design, testing, and production of weapons. It also paved the way for the establishment of a joint committee to effectively implement the agreement.¹⁹

In 1998, exchange visits between the militaries of the two countries continued. In April, Russia's ground forces commander Y.D. Bukreev visited Korea at the invitation of ROK Army Chief of Staff General Kim Dong-shin. In May, Vice Defense Minister Nikolai Mikhailov visited Seoul to have a meeting with his Korean counterpart, Ahn Byung-gil. At the vice ministers' meeting, the two sides agreed to hold a working-level "defense policy meeting" of directors on a regular basis, and signed a memorandum of understanding on the exchange of military personnel for the 1998-1999 period. At the meeting, Mikhailov promoted arms sale by asking Korea to buy Russian-made submarines and S-300 surface to air missiles (SAM).²⁰ In October 1998, the ROK and Russia conducted their first joint naval exercises in communication and maneuvering in the Bay of Peter the Great, off Russia's Far East in the East Sea of Korea.²¹

South Korea welcomed the opportunities for personnel exchanges and military cooperation with Russia. By deepening military cooperation with Moscow, Seoul expected to further weaken the military connection between Moscow and Pyongyang and better cope with the military threat from Pyongyang by accumulating knowledge and intelligence about the North's armed forces. Since North Korea's military institutions and policies were heavily influenced by the Soviet Union/Russia, learning about the Russian armed forces was deemed

19 "Russia Sign Agreement on Defense Ties," *The Korea Times*, November 11, 1997, p. 3.

20 FBIS-EAS-98-149, May 29, 1998, in *The Korea Times* (Internet version), May 29, 1998.

21 ITAR-TASS, October 19, 1998, in FBIS-UMA-98-292.

necessary for South Korea to enhance its military capability. In addition to exchanges visits and contacts, Russia and South Korea expanded their military cooperation in the areas of arms sale and technology transfer.

III. Russia's Arms Sales to South Korea

Sales of weapons and military technology have been an integral component of ROK-Russia military relations. Russia's outstanding debt to South Korea, Russia's need to earn cash through arms exporting, and South Korea's desire to diversify sources of high-tech weapons and core military technologies have all intertwined to boost mutual interest in arms sales and technology transfer.

Russia's arms export to South Korea has been closely related to the repayment of Russia's debt to South Korea. South Korea provided \$1,470 million in loans to the former Soviet Union by the end of 1991 as part of a \$3 billion loan package promised in exchange for granting diplomatic recognition to Seoul.²² In the wake of the Soviet Union's collapse, South Korea and Russia negotiated the debt repayment issue, and in May 1992 Russia agreed to assume the former Soviet Union's debts to South Korea. Negotiations on debt repayment reached an impasse due to different approaches to repayment methods: Moscow wanted to sell military products to Seoul to pay for the debts, whereas Seoul demanded repayment in cash or in kind. During his visit to Seoul in August 1993, Aleksandr Shokhin, Vice Premier for External Economic Relations and Chair of the Russian Military Technology Commission, officially proposed that South Korea purchase Russia's most advanced weapons and related systems as a way of settling Russian debts. South Korea did not accept the offer on the grounds that

22 After the Soviet Union repeatedly failed to repay the debt on schedule, the South Korean government decided to stop paying the rest of the \$3 billion loan.

"military strategy was more important than the quality of weapons." Interoperability with South Korea's existing weapons system and U.S. pressure to purchase its weapons were serious concerns to the ROK.

In August 1994, Seoul and Moscow reached a compromise solution on Russia's debt repayment, and agreed in principle that Russia should repay half the debts with military hardware and the remaining half with raw materials.²³ Since Russia was incapable of paying cash to settle the debts due to severe economic difficulties at home,²⁴ South Korea was forced to accept whatever Russia had to offer, including armaments and military equipment. At first, the ROK Defense Ministry was interested in acquiring a limited quantity of Russian weapons for training purposes. Since North Korea's armed forces are equipped mostly with Russian-made weapons and equipment, it wanted to become familiar with North Korea's weaponry through Russian military products. The first shipment of Russian weapons and ammunition arrived in South Korea on September 18-19, 1996. On October 1, 1996, South Korea created its first mechanized infantry battalion armed with Russian-made BMP-3 (the Russian version of the U.S. Army's Bradley fighting vehicle).²⁵ The Russian weapons provided to South Korea included T-80U main battlefield tanks, BMP-3 armored fighting vehicles, IGLA portable anti-aircraft missiles, and Metis anti-tank missiles.

In the 1990s, South Korea embarked on a number of military pro-

23 The deal was that Russia would provide half of the payment in kind as commodities (machinery, copper, and other commodities), 5 percent as helicopters, and the remaining 45 percent in military hardware. Russia would provide seven civilian helicopters (worth \$4 million each) to be used to fight forest fires. Russia would provide a list of weapons and South Korea would select the items and their quantity from the list. *Choson Ilbo*, August 4, 1994; *Hanguk Ilbo*, August 4, 1994.

24 Even after the compromise, Russia paid only intermittently and did not provide raw materials and finished goods as scheduled. Russia was \$450 million in arrears by the end of 1993. It also accumulated an outstanding debt of \$650 million for the 1994-1995 period.

25 "ROK Army Activates Russian Arms-Equipped Infantry Battalion," *The Korean Herald*, October 2, p. 3, in FBIS-EAS-96-192, October 2, 1996.

curement projects to upgrade existing armaments and to acquire high-tech weapons and equipment. The ROK's military force improvement programs (FIPs)²⁶ were launched in 1974 by President Park Chung Hee to build a self-reliant military capability against North Korea's threat. Their main focus has taken three stages: (1) quantitative expansion of military capability in the 1970s; (2) qualitative improvement of combat equipment and weapons systems in the 1980s; and (3) building a future-oriented military force based on high-tech weaponry and military equipment in the 1990s (especially after the Gulf War).²⁷ The ROK armed forces now have the dual task of deterring North Korea's military aggression and coping with an uncertain security environment in the 21st century. High on ROK FIPs' agenda are the creation of the industrial and technological basis for highly advanced weapons and equipment and the establishment of a self-reliant defense posture.

Russia has persistently promoted its military products for ROK's FIPs. In early 1999, Russia suggested that it repay its remaining debt to South Korea with high-tech weapons since it could no longer provide natural resources, such as aluminum and copper, due to its economic turmoil. Russia's proposal was that South Korea pay in cash for half of the military purchases from Russia and use the Russian debt to pay the other half.

South Korea accepted Russian tanks, APCs, and portable anti-aircraft and anti-tank missiles as a partial repayment of Russian debt. However, the import of highly advanced Russian weapons, such as the S-300 tactical anti-ballistic missile system, the Kilo submarine, and the Su-35 (Su-37) fighter jet, was a different matter. Such a deal not only entails high price tags but also makes a long-term impact on its military improvement programs. Besides, U.S. pressures to choose American

26 South Korea's military modernization program was initially called the Yulgok Program, but was later renamed FIPs.

27 *The Defense White Paper 1998* (Seoul: Ministry of National Defense, the Republic of Korea, 1999), pp. 155-160.

military products over others made the matter much more complicated. In choosing an arms supplier, South Korea has to weigh political gains/ losses as much as military and technical factors.

Arms trade is vital to Russia's economy since it constitutes the second largest source of the Russian government budget revenue.²⁸ The Russian military-industrial complex is also highly dependent on arms trade for its revenue. In 1997-1998, 62 percent of its revenue came from foreign trade.²⁹ Russia inherited about 70 percent of the Soviet military-industrial complex. Russia's military output has declined by 80 percent since 1991 and military production facilities operate at 10 to 15 percent of capacity.³⁰

Naturally, Russia is pitching hard to sell its weapons to South Korea. Rosvoorouzhenie,³¹ Russia's state-run arms sales firm, has stationed two representatives permanently in Korea. Moscow has officially offered Seoul a wide range of sophisticated weapons, including the Su-35 or Su-37 fighter aircraft, the Kilo-class diesel submarine, and the S-300 tactical anti-ballistic missile system. Russia's primary interest in arms trade is commercial: it wants to pay off its debt to Seoul with weapons and to provide additional weapons and spare parts for cash. After all, arms trade is extremely profitable, and Russian military products are the only manufactured items that can effectively compete on

28 Oil and gas sales provide more than three-quarters of Russia's annual budget revenue.

29 Igor Khripunov, "Russia's Weapons Trade: Domestic Competition and Foreign Markets," *Problems of Post-Communism*, Vol. 46, No. 2 (March/April 1999), p. 41.

30 *Ibid.*, p. 40.

31 In January 1994, three Russian state associations dealing in arms - Oboronoexport, Spetznvneshtekhnika, and GTsSK-were replaced by Rosvooruzhenie. Pyotr Latavrin, "Russian Arms Exports: New Aspects of an Old Business," *International Affairs* (Moscow) No. 7 (1994), pp. 33. In September/October 1997, Rosvooruzheniye was reorganized and two other organizations, PromExport and Rossiyskiye Tekhnologii, were allowed to act as marketing agents for Russian defense industries. Stockholm International Peace Research Institute, *SIPRI Yearbook 1998* (New York: Oxford University Press, 1998), p. 296.

the world market. Arms sales to South Korea also would have the effect of strengthening bilateral military ties.

From Seoul's perspective, purchase of Russian weapons is attractive in three ways. First, Russian weapons are of high quality and relatively inexpensive. The T-80U, the latest version of Russia's MBT (main battle tank), is priced at two-thirds the cost of Korea's self-developed K1 and one-half that of the U.S. M1A1 Abrams.³² Second, by diversifying its sources of arms procurement, Seoul can reduce its excessive military dependence on the U.S. Third, Russia is willing to transfer core military technologies to arms importers, and Seoul badly needs core technologies for military independence.

Missiles Systems

Russian armaments have been a strong contender for South Korea's SAM-X, FX, and SSU projects. Seoul possesses the Nike Hercules surface-to-air missile that was developed by the U.S. in 1954. These missiles are long overdue for replacement. The ROK Defense Ministry had for a long time planned to replace this system with a modern missile system. The ROK's surface-to-air missile program, code-named SAM-X, is an ambitious and expensive undertaking. South Korea launched an estimated \$1 billion weapons procurement project to defend against possible attacks from North Korea's Scud-type missiles. The Korean Defense Ministry chose the U.S. Patriot air defense system and the Russian S-300 missile system as the final candidates for the project, and has been carefully weighing the two systems.

The S-300 comes in two types: S-300 PMU-1 (SA-10 Grumble) and S-300V (SA-12A/B Gladiator/Giant). The S-300 PMU-1 is designed primarily as an anti-aircraft missile and the S-300V as an anti-tactical ballistic missile (ATBM).³³ The S-300V system features similar perfor-

32 "Defense Ministry Considering Purchasing Weapons From Russia," *The Korea Times*, September 8, 1996, p. 3, in FBIS-EAS-96-176, September 8, 1996.

mance statistics as the U.S.-made Patriot missile system by Raytheon. The S-300V has two types of interceptors. Model 9M82 (SA-12B Giant) is the larger one and has a top speed of 2.4 Km./Sec. It can engage missiles and aircraft from 13-100 Km. at altitudes of 1-30 Km. (3,300-98,000 ft.). Against missile targets, the engagement range is 20-40 Km. Model 9M83 (SA-12 Gladiator) has a top speed of 1.7 km./Sec. and is optimized against aircraft at shorter ranges of 6-75 km at altitudes of 25-25,000 meters. Russian officials claim that the S-300 is superior to the U.S. Patriot. The S-300 air defense system successfully intercepted a Russian submarine-launched cruise missile flying over the Barents Sea.³⁴

The S-300 has advantages over the Patriot in price and technology transfer. The price of the S-300 is about 30 percent less than that of the Patriot. Purchasing the S-300 is even more appealing to South Korea because it can partially pay for the missile system by using the Russia's debt. Furthermore, Russia is more willing to transfer core technology than the U.S. The Fakel Design Bureau, which produces the S-300, even offered an upgradeable system, providing some assurance of continued improvement.

The Patriot, on the other hand, is more compatible with South Korea's existing weapons system since 80 percent of South Korea's weapons imports are from the U.S., and 37,000 U.S. combat troops are stationed in the country. In addition, purchasing the Patriot would not strain the U.S.-Korean alliance.

While both the U.S. and Russia were making pitches to win the SAM-X project, U.S. Secretary of Defense William Cohen warned South Korea not to purchase the S-300 over the Patriot in a press conference held in Honolulu in April 1997: "it [Seoul's purchasing the S-

33 Nikolay Novichkov and Michael Dornheim, "Russian SA-12, SA-10 On World ATBM Market," *Aviation Week & Space Technology*, March 3, 1997, p. 59.

34 Richard F. Staar, "Beyond the Unipolar Moment: Moscow's Plans to Restore Its Power," *ORBIS*, Vol. 40, No. 2 (Summer 1996), p. 383.

300] won't play well in [U.S.] Congress at all."³⁵ Such a blatant remark from a senior U.S. government official aroused public outcries in Seoul. Russia's reaction to the remark also was highly critical. Georgi Kunadze, Russian Ambassador in Seoul, denounced the U.S. for unfair competition and argued that the military sales should be based on product quality and the principles of free trade.³⁶ Inter-ministerial conflicts between the ROK Ministries of National Defense and Finance and Economy over the SAM-X procurement further tangled the problem.³⁷ Preliminary plans for the SAM-X project called for implementation before the year 2000, though this date has been delayed numerous times. Recently, Seoul announced that it would have to push back the SAM-X implementation to 2000; more recently, the target year was set to 2003. This delay was due mainly to lack of sufficient financial resources.

Pyongyang's test firing of the three stage Taepodong-1 missile on August 31, 1998, has caused a stir in the international community and strongly motivated Seoul to accelerate its own missile program. In November 1998, the ROK Defense Ministry announced that it had initiated a program in January 1998 to develop a medium-range surface-to-air missile, code-named M-SAM. M-SAM, with a range of 40 km, will be designed to intercept invading North Korean military aircraft and Scud-type missiles. This system aims to replace the aging anti-aircraft Hawk missiles that South Korea currently employs. South Korea

35 "Cohen's Remarks on Missile Deal Erode Support for His Seoul Visit," *The Korea Times*, April 9, 1997, p. 3.

36 "Cold-War Foes Bid for Missile to South Korea: Ambassador Kunadze Says Russia Hopes for Chance for Fair Competition with U.S.," *The Korean Herald*, April 12, 1997.

37 The Defense Ministry opposes the purchase of Russian weapons, including the S-300, on the grounds that Russian weapons would not contribute to improving Korean military capability and that purchasing Russian weapons over American objection would create tensions between the U.S. and the ROK, damaging Korean security interests. In contrast, the Ministry of Finance and Economy prefers to settle the Russian debt issue as early as possible by importing Russian weapons, including the S-300.

hopes to incorporate anti-missile capability into its middle-range SAM. The missiles are expected to be operational in 2008. The ROK plans to acquire technological help from Russia in areas such as electronic guidance in developing the M-SAM. The M-SAM is modeled after the S-300.³⁸

Fighter Aircraft

Russia's S-35 fighter aircraft has been competing for South Korea's FX next-generation fighter program. As the ROK Air Force completes the \$5 billion Korea Fighter Program (KFP)³⁹ to replace its aging F-14 Phantoms and F-5 Freedom Fighters with 120 KF-16s, it is searching for candidates for Korea's next-generation fighter program, code-named FX, worth about 8 trillion won. This new fighter has been planned for some time, and Seoul is eager to acquire new generation military aircraft. The Rafale of French Dassault, the F-15E of U.S. Boeing, the Su-35 of Russian Sukhoi, and the Eurofighter Typhoon jointly developed by Germany, the United Kingdom, Spain, and Italy are considered the top candidates for the FX program.

Russia made its entrance into the bidding at the Seoul Air Show '96. Moscow offered its state-of-the-art Su-35 and Su-37 fighter planes. Sukhoi Design Chief Igor Yemelyanov offered South Korea heavily modified Su-35s or Su-37s to meet the ROK Air Force requirements.⁴⁰ The Su-35 will be equipped with phased grid radar and multifunction-

38 "ROK to Develop Missile Interceptor," *The Korea Times*, September 4, 1998. Nikolai Polyashev, director of the Almaz bureau, announced in July 1999 that his bureau was developing parts of air defense systems for South Korea. Interfax, July 20, quoted in *RFE/RL Newswire*, July 21, 1999.

39 Under the KFP that started in 1994, 12 F-16s were purchased from Lockheed Martin and Samsung has assembled 36. Samsung is producing additional 72 under a license agreement with Lockheed Martin.

40 Nicolay Novichkov, "Desperate for sales, Moscow courts Seoul," *Aviation Week & Space Technology*, November 18, 1996, p. 31.

al color displays, and AL-31FP variable jet direction engines.⁴¹ The Russian proposal included the assembly of Su-35s in South Korea, 100 percent servicing, and technology transfers. Russia suggested that South Korea pay partly in cash and partly with the Russian debt owed to South Korea. Budget constraints also are delaying Seoul's decision on the FX project.

Submarines

In 1987, the ROK launched its first submarine program to produce nine 1,200-ton 209-class diesel submarines. Daewoo teamed up with Germany's HDW for this project. As of 1998, Daewoo had produced seven 209-class submarines and was building two more. As the first submarine program nears completion, the ROK Navy is pushing for the submarine program, code-named SSU, to acquire 1,500-2,000-ton class advanced submarines by early 2000. In the long run, the ROK Navy plans to use its own technology to build 3,000-ton class submarines that are capable of launching missiles and staying under water for an extended period of time. Daewoo with German HDW's technology, Hyundai with French DSN's technology, and Russian submarines are final candidates for the SSU project.⁴²

Russia has been lobbying hard to sell its submarines (2,500-ton Kilo-class or 1,900-ton Amur-class diesel submarines) to South Korea. Russian officials proposed that South Korea pay 50 to 70 percent of the submarine's cost in cash with the remaining amount to be credited to repayment of its debts. During his visit to Seoul in March 1998, Russian Vice Defense Minister Nikolai Mikhailov officially requested that the ROK purchase Russian-made submarines and S-300 missiles.⁴³

41 Nezavisimoye voyennoye obozreniye, October 16-22, 1998, p. 113.

42 Russian submarines were initially excluded from consideration, but in August 1998 the ROK Ministry of National Defense decided to include Russian-made submarines in the SSU project.

During his visit to Seoul in April 1998, Admiral Vladimir I. Kuroyedov, Commander-in-Chief of the Russian Federal Navy, expressed Russia's willingness to participate in the SSU program.⁴⁴ Gennady Seleznyov, speaker of the Russian State Duma, promoted Russian submarines for the SSU procurement when he visited Seoul in April 1999 leading a Russian delegation.

On May 20, 1999, the Korean Defense Ministry announced its plan to purchase three 2,300-ton Kilo class diesel submarines from Russia.⁴⁵ The \$1 billion deal would be paid half with cash and half as debt repayment. The surprise announcement was made shortly before President Kim Dae Jung's scheduled state visit to Russia. Obviously the controversial decision was made out of political considerations. In the wake of the spy scandal in 1998, the relationship between ROK and Russia reached its lowest point since the two countries opened diplomatic relations in 1990. It appears that President Kim hastily reached the decision in the hopes that Russia-Korea relations would improve quickly and his impending Moscow trip would bear fruits.

The ROK Navy is opposed to the purchase of the Kilo submarine on the grounds that it has less operational ability than the ROK Navy's 209-class.⁴⁶ ROK naval officers point out that the storage battery of a Kilo-class submarine lasts about 18 to 24 months, whereas the German-made batteries of the 209-class submarines last five years longer. They also note that the submarines offered by Germany's HDW and France's DCN will have the capability to stay submerged longer with their advanced Air Independent Propulsion (AIP) systems. ROK Naval officers maintain that the Kilo-class submarine is an outdated model and that there will be problems with spare parts.⁴⁷ Reversing its earlier

43 *The Korea Times*, "Russia Pushing for Weapons Sale to Korea," May, 30, 1998.

44 *ITAR/TASS*, April 29, 1998.

45 *The Korea Herald*, May 20, 1999.

46 The Kilo-class submarine has six torpedo tubes for 18 torpedoes and mines and a launcher for eight surface-to-air missiles. It can stay at sea for 45 days and dive up to 300 meters deep. Its top speed under water is 10 knots.

decision, the ROK Ministry of National Defense announced in July 1999 that the final decision on the SSU project would be postponed for one year because the decision to import the Kilo submarines was too controversial. It also announced that the final decision to purchase the Russian submarines would be made sometime in late 1999 or early 2000.⁴⁸

IV. Technology Transfer to South Korea

Acquiring core military technologies necessary for high-tech weapons is a top priority for the ROK. Russia is more open to technology transfer than other arms suppliers. South Korea is most interested in acquiring core technologies and key weapons components in pursuing military cooperation with Russia.

Again, Russia's severe economic problems force Russian military producers and R&D (Research & Development) institutes to search for customers abroad. The level of the Russian government's funding for military R&D has dwindled drastically since the Soviet era and Russian R&D institutes are struggling to sustain a military technology base. According to SIPRI, "Russian design bureaus [are] encouraged to sell their services directly to foreign firms, offering either technology transfer or simply modification of arms produced in Russia for export."⁴⁹ In fact, export of armaments and military technology is directly linked to the survival of the Russian military-industrial complex. Part of the income from arms export and technology transfer has been used for R&D and for the procurement of advanced weapons such as the Su-30, Su-35 and Su-37 aircraft for the Russian military.⁵⁰ India agreed to pay

47 *The Korea Times*, June 4, 1999, p. 9, in FBIS-EAS-1999-0604, June 4, 1999.

48 *Chosun Ilbo*, July 27, 1999.

49 Stockholm International Peace Research Institute, *SIPRI Yearbook 1998*, pp. 271-272.

50 *Ibid.*, p. 296.

\$1.8 billion to purchase 40 Su-30M multi-purpose aircraft and to finance further development. India paid an additional \$200 million directly to the Sukhoi design bureau for the development of more advanced variants, the Su-30MKI. Reportedly, China is acquiring technology from Russian R&D institutes for submarine and ballistic missile projects and Iran for ballistic missile projects.⁵¹

The intergovernmental agreement on scientific and technological cooperation between the Soviet Union and South Korea signed in Moscow in December 1990 paved the way to bilateral military technological cooperation. South Korea has actively pursued technological cooperation with Russia through the Korean Institute of Science and Technology (KIST) and the Agency for Defense Development (ADD). The Russo-Korean technological cooperation began with dual-use technology and later expanded into military technology.

The technological cooperation in aviation and aerospace fields started as early as 1992. In January 1992, Daewoo Heavy Industries Co. imported the Russian technology to build pilotless helicopters for agricultural purposes. In the same year, Daewoo was engaged in joint production of brake disks for aircraft with the Niigrafit Research Institute and was working on high-performance training planes with the Mikoyan Avionics Research Institute, and Samsung Aerospace Industries Co. was involved in the joint development of composite materials for aircraft with the Central Aero-Hydrodynamic Institute.⁵²

The legal foundation for bilateral military technology cooperation was laid in November 1997, when Vice Defense Minister Yi Chung-rin and his Russian counterpart Nikolai Mikhailov signed an agreement to enhance bilateral cooperation. The agreement called for one side to provide the other with assistance in technology transfer and information on the design, testing and production of weapons.⁵³

51 *Ibid.*, p. 272.

52 *Yonhap*, September 2, 1992, in FBIS-EAS-92-178, p. 23.

53 *The Korea Times* (Internet version) November 21, 1997, in FBIS-EAS-97-327,

South Korea's missile development programs will benefit immensely if the ROK can enlist Russia's technological help. South Korea's indigenous missile development program started in the mid-1970s with the help of the U.S. The 1990 diplomatic note signed by the U.S. and the ROK stipulates that South Korea should not develop missiles with a range longer than 180 Km. In exchange, the U.S. provided technological support for South Korea's NHK-2 (Hyunmu) missile program. The NHK-2, the longest missile South Korea possesses, has a striking range of 180 km. As the last batch of U.S.-made high-tech parts for Korea's NHK-2 missiles is delivered to Korea in 1999, the diplomatic note will lose binding force. In 1998, South Korea demanded that the U.S. allow it to develop missiles with a range up to 300 km, which is permitted by the Missile Technology Control Regime (MTCR). In response, the U.S. attached an unusual condition: the U.S. would allow a maximum range of 300 Km for South Korean missiles but South Korea must open its missile development programs to U.S. inspections.⁵⁴ The U.S. condition is unacceptable to South Koreans because U.S. inspection of Korean missile programs would be a serious violation of Korean national sovereignty. During his visit to Washington in July 1999, President Kim Dae Jung demanded the right to develop and deploy military missiles with a maximum range of 500 km and to develop private rockets for scientific purposes without range limits.⁵⁵

U.S. inflexibility about the missile issue is driving South Korea towards Russia, who is willing to sell missile technologies and components for cash. As of January 1999, South Korea was considering the purchase of military and industrial high technology worth \$200 million from Russia as a partial repayment of Russia's debt. Among others, the ROK Defense Ministry was interested in radar, missile guidance, and

November 23, 1997.

54 *The Korea Herald*, August 11, 1998, p. 1.

55 *Chosun Ilbo*, July 4, 1999.

other electronic technology.⁵⁶

South Korea's sudden decision in August 1998 to include the Russian Kilo-class submarine as a candidate for its SSU program is likely to have been influenced by Russia's offer to provide advanced technology. During his 1998 trip to Moscow, Admiral Yu Sam-nam, Chief of ROK Naval Operations, was offered a complete Russian submarine package, which included submarine-building technologies. Russia even offered to provide onboard vertical launcher technology. In contrast, German HDW did not provide core technologies related to submarine design throughout the 209-class submarine program.⁵⁷

V. Limitations and Obstacles to Seoul-Moscow Military Cooperation

Russia has displayed a strong interest in arms sales, while the ROK is most interested in the transfer of advanced military technology. Although the two countries harbor different motivations, interests, and plans, Russia and South Korea have rapidly increased military ties as they follow common interests.

Arms sales and technology transfer to South Korea are profitable to Russia. Although Russia's military industrial capacity has stagnated in recent years, its military products remain competitive. South Korea, one of the largest arms importers in the world, can become a valuable

56 "ROK to Receive \$200 Million High Tech Military Transfer from Russia," *The Korea Times*, January 25, 1999. South Korea is eager to acquire Russia's sensitive technologies for its M-SAM program. In early 1998, a Korean official reportedly went to Russia to negotiate the terms of the purchase of advanced technology. *The Korea Times* (Internet version), December 8, 1998.

57 *The Korea Times*, August 18, 1998, p. 3, in FBIS-EAS-98-230, August 18, 1998. South Korea's source of advanced technology is not limited to Russia. South Korea plans to put a military spy satellite into the orbit in 2005 with the help of France's electrical optics technology. *The Korea Herald* (Internet version), November 5, 1998, in FBIS-TAC-98-308, November 4, 1998.

customer for Russian weapons. Former outlets for Russian weapons have recently dried up, while the capacity to produce still exists. The Russian government has neither the need nor the funding for weapons purchases. To make matters worse, worldwide demand for modern weapons has greatly dwindled, and competition among major arms suppliers has intensified. Between 1990 and 1995, the volume of worldwide arms trade shrunk from \$50 billion to \$25 billion. This situation has dealt a devastating blow to Russia's military-industrial complex. Export of armaments, military technology, and related services have become a crucial source of revenues for the Russian military industry, and Russia is aggressively marketing its military products in South Korea.

South Korea may find economic benefits in military cooperation with Russia. Seoul and Moscow can jointly develop advanced technology and high-tech weapons and sell them in the world market. The relationship between the two countries may be mutually complementary: Russia has advantages in basic sciences and advanced technologies, while South Korea has strengths in marketing skills and capital.

South Korea's purchase of Russian weapons began out of an economic necessity, not political or military calculations. Russia pushed military hardware on South Korea as partial repayment of its debt to South Korea, forcing South Korea to accept what Russia had to offer. In this way, South Korea was dragged into an arms trade with Russia. Neither Russia nor South Korea had a real choice in this regard. Arms trade with Russia, however, may have a lasting impact on South Korea's military capability and may affect South Korea's security relations.

ROK-Russian military cooperation may alter political relations. Since the Korean peninsula is geo-strategically important to the Russian Far East, Russia wants to cultivate a friendly and cooperative relationship with South Korea. Military relations with South Korea may offer opportunities for Russia to increase its influence in Korean affairs.

Seoul wants to reduce its heavy dependence on the U.S. for armaments and equipment by diversifying the sources of military procurement, and Russia may become an alternative source. By reducing its military dependence on the U.S., Seoul may more readily find its place in the new international order. The U.S. has played a pivotal role in the Korean peninsula and Northeast Asia as the guarantor of peace and stability, but there is no guarantee that it will stay in the region in the 21st century.

Russo-Korean military cooperation has geo-strategic implications. Russia considers a unified Korea a long-term strategic partner. The Russians believe that a power vacuum is being created in Northeast Asia as U.S. military troops in the Western Pacific are gradually being withdrawn and Russia's military presence in the Far East is reduced. They foresee a threat to the region's security and stability if the Japanese military buildup accelerates and China's military modernization is left unchecked. It is in Russia's interests to prevent any country, particularly Japan and China, from attaining a position of dominance in a region. In this context, South Korea (more likely a unified Korea) may become Russia's ally, and accumulated military relations between South Korea and Russia may pave the way to a military alliance.

As the power structure in Northeast Asia shifts in the early 21st century, Korea may become Russia's strategic ally. If the U.S. follows an isolationist foreign policy and disengages from East Asia completely (including abrogating its military alliances with Japan and Korea), a unified Korea will no longer be able to depend on it for security. Should Japan emerge as the major military threat to Korea, Korea could form a military alliance with Russia, which has never invaded it. Both Korea and Russia have territorial disputes (over the Tokdo [Takeshima] Islets and the Kurile islands, respectively) and have reason to fear Japan's military resurgence.

The prospects for Russo-Korean military cooperation are not all rosy. Numerous obstacles are likely to constrain such cooperation.

First, import of Russia's advanced weapons and equipment may cause technical problems in the Korean military. Seoul's existing weapons systems are supplied by the U.S. or based on U.S. technologies. High-tech weapons and equipment from Russia are likely to cause some incompatibility problems and may not function smoothly with other military equipment in South Korea. Russian officials have assured South Korea that Russian weapons can be easily adjusted to work with Western weapons systems, citing Greece as an example: Greece, whose weapons system also is heavily Western-oriented, agreed in 1998 to purchase both the Russian-made Tor-M1 AA missile system and the U.S.-made Patriot missile system. However, U.S. and ROK Defense Ministry officials disagree, arguing that the compatibility problem is genuine and may cause serious problems. Some U.S. officials even argue that by purchasing Russian weapons South Korea is violating the 1954 Mutual Defense Treaty that assured the interoperability of weapons. This interoperability issue remains unresolved, and is likely to remain a barrier to Russian arms sale to South Korea.

Second, Russia's unreliability as an arms supplier is a serious concern among Korean military officials. ROK Defense Ministry officials repeatedly state that they do not wish to accept any more Russian weapons. A Korean Defense Ministry official revealed that some of the Korean BMP-3 and T-80U battalions remain idle because of a shortage of supplies. The Russians did not even provide repair manuals for the armaments, causing Korean soldiers to improvise to keep the Russian tanks in operational condition.⁵⁸ In fact, certification of outputs, reliable post-sale servicing, and the provision of spares remain "the Achilles heel of Russian arms trade."⁵⁹ Russia also impressed Koreans as an unreliable partner during the 1998 Seoul air show. Reneging on its earlier promise, Russia failed to send the Su-35 high-tech fighter jet there. It turned out that bureaucratic squabbles were responsible for the no-

58 *The Korea Times* (internet version) April, 2 1999.

59 Litavrin, *op. cit.*, p. 33.

show.⁶⁰ Problems relating to services and supplies are further exacerbated by frequent institutional restructuring and personnel changes,⁶¹ contradicting decrees and laws, administrative confusion, widespread corruption, and bureaucratic infighting inside Russia.

Third, Russia's political instability and economic troubles may cause discontinuity and disruptions in arms sales and technology transfer. Arms trade and technology transfer require a long-term commitment from Russia. Seoul will hesitate to enter into a long-term contract for arms sales and supplies from Russia unless domestic political and economic conditions in that country stabilize. Russia's guarantee to service equipment and supply parts does little to reassure Koreans uncertain about whether Russian arms suppliers will remain in business in the future.

Fourth, South Korea will not easily disregard U.S. objections to and suspicions of a close military cooperation between South Korea and Russia. The U.S. wants to maintain a dominant influence in the Korean peninsula and monopolize arms sales to Korea. As long as North Korea poses a military threat to South Korea, the U.S. will remain South Korea's most important military ally. Nevertheless, South Korea has demonstrated its readiness to buy weapons from a country offering superior products and generous technology transfer. In October 1997, the ROK Defense Ministry decided to purchase the French-

60 The directors of *Aviatsionniy Voenno-Promyshlennogo Kompleks Sukhoy*, the Sukhoy Experimental Design Office, the aircraft manufacturing associations in Irkutsk, Novosibirsk, and Komsomolsk-na-Amure, and the *Rosvooruzheniye* public company could not agree on money matters. Their disputes were about questions such as: Who should show the aircraft at the air show? Who should pay for participation costs? Who gets how much in the event of a successful sale? Oleg Vladynkin, "Show the Armor: Russia's Arms," *Obshchaya Gazeta*, November 12, 1998, No. 45, p. 3., in FBIS-SOV-98-327, November 23, 1998.

61 Russian arms trade policy has been inconsistent due to frequent institutional and personnel changes. For further details, see Igor Khripunov, "Russia's Weapons Trade: Domestic Competition and Foreign Markets," *Problems of Post-Communism*, Vol. 46, No. 2 (March/April 1999), pp. 39-48.

made Mistral over the U.S.-made Stinger, in a deal worth more than \$300 million.⁶²

Fifth, Seoul may sacrifice its relations with other major powers if it focuses exclusively on military cooperation with Russia. The U.S., Japan, and China are important trading partners for South Korea, and South Korea maintains interdependent relationships with these neighbors. Close military cooperation (or alliance) with Russia may create unnecessary alarm and fear from these powers.

VI. Conclusion: Policy Recommendations

The development of Russo-Korean military relations has been remarkable. With the exception of the U.S., none of the major powers maintain such extensive military ties with South Korea. Seoul-Tokyo military relations are limited to personnel contacts, exchanges, and mutual consultations, and Seoul-Beijing military relations have just begun mainly in the form of personnel contacts and exchanges.

The rapid growth in Seoul-Moscow military ties is attributable to a number of factors. First, the end of the Cold War and the establishment of a formal diplomatic relations between Seoul and Moscow fostered conditions necessary for the two countries to initiate military cooperation. Second, repayment of Russia's debt to South Korea provided a convenient excuse for Russia to offer its military hardware to South

62 *Choson Ilbo*, October 17, 1997. The prospective providers included Matra of France, which manufactures Mistrals, Britain's Short Missile Systems, producer of Starbursts, and U.S. Hughes Aircraft which makes Stingers. Korea had purchased about 1,000 Mistrals in the early 1990s. The choice of the French missiles was made because they were thought to be more reliable and the French firm was more cooperative in terms of technology transfer. In addition, Russia's IGLAs and Sweden's RBS70s also were potential contenders for the deal. "ROK Plans To Procure \$125-Million-Worth of Antiaircraft Missiles," *The Korea Times*, August 21, 1996, p. 3., in FBIS-EAS-96-163, August 21, 1996.

Korea as a repayment option. As the debt repayment issue continued to stall due to Russia's economic difficulties, South Korea was forced to consider the purchase of high-tech weapons and equipment from Russia to settle the debt issue. Third, South Korea's decision to import Russian military hardware was based on two factors: the continuing military threat from North Korea and South Korea's need for military modernization. Initially, South Korea's military refused to introduce Russian weapons into its arsenal for political and technical considerations. Still, it was willing to accept a limited number of Russian weapons to better cope with North Korea's military threat through a better understanding of North Korea's weapons system, which is composed mostly of Russian weapons. In the same vein, the ROK Defense Ministry sent Korean military officers to Russian military institutes for training and education. Seoul also saw a good opportunity to strengthen its base for core technologies and military industry in military-technological cooperation with Russia. Unlike other suppliers of high-tech weapons, Russia is willing to transfer "core" technologies and components required for the development of sophisticated weapons and equipment.

As exchange visits of military personnel between Seoul and Moscow continue into the 21st century, mutual confidence and trust between South Korea's and Russia's militaries will grow. Large-scale Russian arms sales to South Korea are problematic since the bulk of South Korea's military hardware and equipment are U.S.-made and Russian armaments may be incompatible with South Korea's existing weapons systems. It would be too risky and costly to operate two different weapons systems. The purchase and operation of Russian advanced military weapons will require a long-term political commitment from South Korea, too, for which South Korea is not ready yet.

More promising are the prospects for joint research and development of high-weapons and military components for domestic consumption and exports. Moscow badly needs cash from abroad to

develop cutting-edge technologies in the military sector and to maintain its military-industrial capability. Seoul, on the other hand, needs to acquire core technologies and military components for its military modernization. Thus, military technological cooperation between Seoul and Moscow is mutually beneficial. Russia's technology transfer to South Korea, however, will be limited without a South Korean commitment to purchase high-tech weapons. Still, South Korea needs to focus on the acquisition of core military technologies and limited military hardware from Russia to enhance military independence.

Russia's debt to South Korea has been a thorny issue in the bilateral relationship and South Korea is eager to settle the matter as early as possible—the debt does not have to be a major obstacle. Given Russia's deplorable economic situation, South Korea needs to reschedule Russia's debt while seeking to resolve the issue gradually and on a long-term basis. North Korea owes about \$3.6 billion to Russia from the Soviet era; in the event the two Koreas unify voluntarily, the unified Korean government will have a legal obligation to assume this debt from Russia.

Expecting Moscow to sell high-tech military technologies as part of a debt repayment scheme is not realistic. For Russia, earning cash is of primary concern, while paying the debt is secondary. Russia's arms design bureaus and weapons manufacturers need cash flow from abroad to survive—they are not likely to provide core technologies and components unless South Korea pays cash to cover a significant portion of the costs.