

Indo-Russian Defence Cooperation, 1991-2011

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By

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ABSTRACT

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The purpose of the present study is to meticulously trace the origin and subsequent strengthening of the Indo-Russian defence ties that finally culminated into the formation of Indo-Russian joint ventures with the deal on BrahMos missile. The year 1991 has been specifically chosen because it marked the end of the cold war and the disintegration of the Soviet Union.

The study first brings to the surface the fact that in British India, the country was highly dependent upon the British weapons and ammunitions. Thus, the possible role of other countries in the Indian defence market was completely ruled out. India gained its independence in 1947 which coincided with the beginning of the Cold War period. The study then moves to explore the cold war conditions under which India developed strategic relations with Russia. Bilateral relations between the two countries were established on 1950's. It was due to the cold war conditions coupled with India's adoption of a mixed economic system and a planned economy that brought the two nations closer to each other. Bilateral relations since the very inception were focused on the defence trade and because of this reason the relations soon culminated into strategic one. In the due course of the Cold War, as the U.S. role in the South Asian affairs tilted heavily in favour of Pakistan, Russia saw it as an opportunity for its defence sector and also for itself to expand its sphere of influence in the South Asian region. Since then the arms have been imported from Russia.

From 1960 to 1990 India imported conventional arms and ammunitions worth U.S. \$ ten to fifteen billion with some of the major arms being transferred as MiG, AN-12, MI-4 and other arms. The depth of Indo-Russian strategic relations was at its peak in the 1971 India Pakistan war when the two nations signed the treaty of friendship. Though the study analyses the defence deals made by the two countries in a great depth, it also examines the individual role of the leadership of both the countries in taking the relationship ahead. Stalin was apprehensive about India's role in the region during the cold war and it was labeled as 'pro-capitalist'. A favorable shift in the policy towards India was seen during the reign of Khrushchev. Relations under the Indian leadership of Nehru gained an impetus.

The problems that have been faced by the Indian defence sector are delays in the delivery of the consignments, high prices of the Russian imports as compared to the earlier Soviet arms supplies, Russian arms being less competitive than their western counterparts etc. All these issues pose a serious challenge for India.

In 2000 India decided to diversify its sources of arms. With this, Israel, Germany, U.S. and other European nations were being viewed as potential partners. It was during this phase that Russia also sought new partners for itself and it forged new relationships with China and Pakistan. Thus, both the countries shifted their attention from each other and focused primarily on the market forces that played its role in the defence sector. India, however, could not do away with Russian technology for its defence equipments because of its past imports- finding a partner country for spare parts would have been tough. Thus, we see that despite India's quest for new relationships in the defence sector, the Indian army's arms and ammunitions is largely Russian dominated.

After tracing the historical roots of the defence relations of the two nations, the study then moves to analyze joint ventures in the defence sector-yet another important aspect of the defence bilateral relations of the two countries. Agreements for the joint ventures were materialized in 1998 whereby both the nations agreed on brahmos co production. This agreement initiated a new chapter for the Indo-Russian defence cooperation.

The study concludes with a brief summary of the dissertation and recommends that India should engage with Russia without deviating from current programs with other suppliers. Russia should manufacture the competitive arms and deliver to India at reasonable prices and on time. India and Russia should focus on long run military contracts to maintain the time tested friendship.

(Mudasir Mubarik)

(Administrative Supervisor)

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LIST OF ABBREVIATIONS

Sr. No.	Full form	Abbreviation
1	Union Of Socialist Soviet Republic	U.S.S.R
2	United States Of America	U.S.A
3	International Monetary Fund	I.M.F
4	International Bank For Reconstruction And Development	I.B.R.D
5	Light Combat Aircraft	L.C.A
6	Stockholm International Peace Research Institute	S.I.P.R.I
7	Institute For Defence Studies And Analyses	I.D.S.A
8	United Kingdom	U.K
9	Non Alignment Movement	N.A.M
10	United Nations Organization	U.N.O
11	Non Proliferation Treaty	N.P.T
12	Atomic Energy Commission	A.E.C
13	Peaceful Nuclear Energy	P.N.E
14	Nuclear Non Proliferation Act	N.N.P.A
15	International Atomic Energy Agency	I.A.E.A
16	Joint venture	J.V
17	Violent Non State Actor	V.N.S.A
18	Association Of East Asian Nations	A.E.A.N
19	North Atlantic Treaty Organisation	N.A.T.O

20	Conventional Forces Of Europe	C.F.E
21	Common Wealth OF Independent States	C.I.S
22	European Union	E.U
23	Military Industrial Complex	M.I.C
24	Gross Domestic Product	G.D.P
25	Original Equipments Manufacture	O.E.M
26	Formal Soviet Union	F.S.U
27	Hindustan Aviantics Limited	H.A.L
28	Light Water Reactor	L.W.R
29	Intellectual Property Rights	I.P.R
30	Request For Proposal	R.F.P
31	Defence Research and Development Organisation	D.R.D.O
32	Maritime Reconnaissance Aircraft	M.R.A
33	Comptroller and Auditor General	C.A.G
34	India's Space Research Organisation	I.S.R.O
35	Global Positioning System	G.P.S
36	Medium Transport Aircraft	M.T.A
37	United Aircraft Corporation	U.A.C
38	Memorandum of Understanding	M.O.U
39	Cabinet Committee on Security	C.C.S
40	Light Water Reactor	L.W.R
41	Space Action Group	S.A.G
42	Comprehensive Test Ban Treaty	C.T.B.T

43	Former Soviet Union	F.S.U
44	Original Equipment Manufacture	O.E.M
45	Conventional Forces of Europe	C.F.E
46	Atomic Energy Commission	A.E.C
47	Peaceful Nuclear Explosion	P.N.E

CHAPTER 1

INTRODUCTION

Bilateral relations between India and erstwhile Soviet Union were established on 17 April, 1947. The relations between the two nations have been based on friendship, mutual trust and cooperation. One of the major reasons for this has been the absence of territorial disputes and ideological differences.

The focus of this dissertation is on the defence relations between India and Russia. India's defence cooperation activities encompass strengthening of defence ties with friendly foreign countries. It includes all contacts and exchanges undertaken by the Ministry of Defence, including the Armed Forces, to avoid hostilities and to build and maintain trust in the interests of mutual security¹.

Cold War Indo-Soviet relationship was shaped by Indian needs, Soviet opportunism, and American ambivalence. Decisions made by the United States in South Asia had significant short-term consequences on Indian military procurement, and an outlook of mistrust and suspicion was created towards the United States. This legacy of the cold war continued till the Indo-US nuclear deal (2005). However, in the changed international situations Indo-Russian ties continue with the two nations moving ahead agreeing to cooperate on joint ventures in the defence realm.

When India initiated the rapid modernization of its armed forces after the 1962 Sino-Indian war, it was unable to realize arms transfer agreements from the west. Consequently, it turned towards the Soviet Union as a reliable alternative. The arms deals had favourable financial terms and included provisions for production licensing.

¹ Annual Report 2011-2012, Ministry of Defence, Government of India, P. 190.

The August 1971 treaty of peace, friendship and cooperation between two nations provided a strong base for strengthening the relationship. The treaty provided that:

“Both the countries solemnly declared that they would not enter into or participate in any military alliance directed against the other, and not to provide any assistance to any third party that is engaged in any armed conflict with the other countries. In case of any attack or threat of attack, on any of the two countries, both shall immediately enter into mutual consultation and to take appropriate effective measures to ensure peace and security of their countries” (V.N. Khanna, 2007: 295).

Then Prime Minister of India, Indira Gandhi preferred cooperation with the Soviet Union during her first premiership (1966-1977), but at a later stage became more pro-Western during her second term (1980-1984). However, the financial, technical and diplomatic limitations made Soviet Union as a preferred partner for its defence deals. As a result in the 1980s, short term military needs were met through Soviet Union as indigenous research in the defence sector was initiated in India.

The Soviet pullout from Afghanistan in 1989, the end of the Cold War and the economic turmoil in India in the early 1990s brought about a drastic change in the Indian priorities. There was a sharp decrease in Indian military expenditures and arms importation. On the Russian side, the formation of CIS and the absence of the bilateral competition between the two superpowers meant that India's geo-strategic role as a “counter-weight” no longer existed. Financial instability and the rise of separatist movements within India made it focus on other aspects than military expansion. Consequently, there was a slowdown in Indian military arms expansion and modernization.

The importance of the United States increased for India because of the financial help from the World Bank and the International Monetary Fund (I.M.F). As a

result of India's Economic Reform Programme, foreign investment in India had risen sharply, with the United States taking the lead as India's largest foreign investor (P. R. Rajeshwari, 1997: 5). Additionally, the United States became a major source of technology for India. (P.R. Rajeshwari, 1997: 6) Later it authorized the transfer of 315 Texas Instruments Pave way bomb-guidance kits to the Indian Air Force (Eric, 1997: 9).

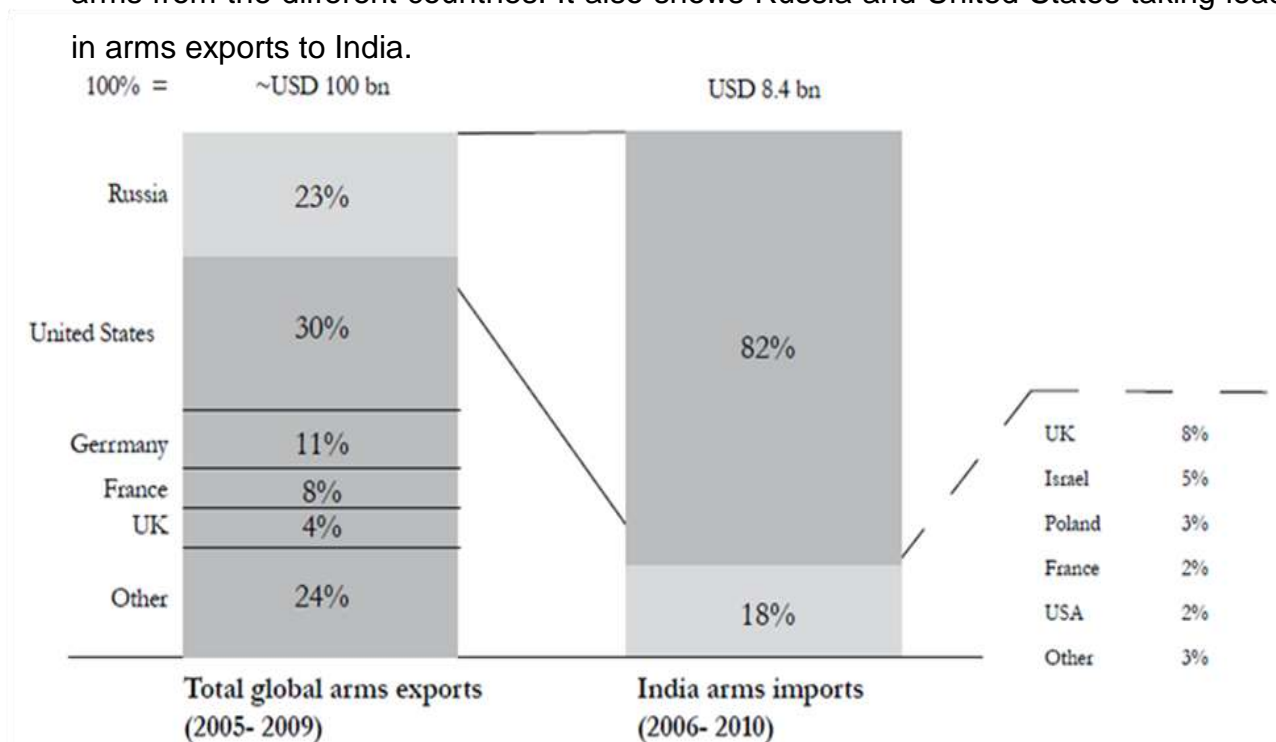
Simultaneously, in 1995, the U.S. Congress passed the Brown Amendment, which lifted most of the sanctions dictated by the Pressler Amendment and allowed the sale of Dollar 658 million worth of military equipment to Pakistan. (Foran. Virginia. 1998: 84). Further, the United States chose not to impose sanctions on China for the transfer to Pakistan of M-11 missiles and parts and five thousand ring magnets for Pakistan's unsafeguarded centrifuges. (Foran. Virginia. 1998: 86). Thus, the United States continued to show a preference towards Pakistan and China. It is against this background that the legacy of the Cold War Indo-American rift persisted. Due to the interplay of the above mentioned factors India initiated the process of carving out its own space in international politics. Though it preferred Russia as a major arms exporter.

Thus, In October 2000 the "Declaration of Strategic Partnership between India and the Russian Federation" was signed in New Delhi and since there has been an all-round development in bilateral cooperation. In this declaration the system of Annual Summits was institutionalized. In 2008 India and Russia agreed to extend the terms of the Indo-Russian Inter Governmental Commission for Military Technical Cooperation for another ten years till 2020 (N. D. Kundan, 2010: 134). Russia continues to remain an important supplier of defence equipment to India. It is the only country with which India has an institutionalized annual defence cooperation mechanism at the level of the Defence Ministers of the two countries².

²Annual Report 2011-2012, Ministry of Defence, Government of India, P. 195.

In the field of Nuclear Energy, Russia is a long standing partner for India. Currently two nuclear power reactors are being supplied by Russia in Kudankulam and two more are planned. In 2009, India designated Raipur (West Bengal) as an additional site for the construction of nuclear power plants with Russian cooperation. An Inter-Governmental Agreement on broad based cooperation (cooperation in the field of use of atomic energy for peaceful purposes) and a Road Map for future cooperation was signed during the visit of Prime Minister Putin to India in March 2010. Recent joint initiatives such as supersonic cruise missile BrahMos, fifth generation fighter aircraft have been undertaken to take the bilateral defense relations to new level.

Defence cooperation thus constitutes an important part of the sixty five years of relationship. According to Stockholm International Peace Research Institute (SIPRI), India was the largest importer of Russian conventional weapons in the world. However, recently, Russia altogether with USA is a leading global supplier of conventional weapons that accounted for eighty two percent of Indian arms imports from 2006-10 (K, Foshko. 2011: 31). The following figure 1.1 shows Indian Imports in arms from the different countries. It also shows Russia and United States taking lead in arms exports to India.



Source: SIPRI data; authorities analysis.

This study becomes important in the background of China-Pakistan strategic relations and the volatile situation in Pakistan though India is diversifying its relations with other countries such as United States of America, Israel, France, Britain and Australia. Russia remains an important ally not only because of the time tested friendship but also because of mutual trust that has been developed overtime. Moreover, with the recent hydrocarbon explorations in the Central Asia, the geo-strategic importance of the region has increased. Thus, it is in the economic, political and defence interests of both the nations to continue their cooperation with each other in various areas.

Research Methodology:

The primary sources of data and information came from the analysis of reports of the Indian Army, Ministry of Defence, Government of India; The Military Doctrine of the Russian Federation, Government of Russia and Stockholm International Peace Research Institute (SIPRI).

The secondary sources included books, articles in various journals, working papers of various educational and research institutes etc such as the Institute for Defence Studies and Analyses (IDSA), Carnegie Endowment for International Peace etc were extensively read on Indo-Russian defence relations.

Objectives of the Dissertation:

This dissertation brings into focus that after the collapse of the Soviet Union the Indo-Russian defence cooperation decreased for a brief period. However with the passage of time the defence relations once again revived in 1993. The Yeltsin period and aftermath opened up prospects of cooperation between the two countries. The objectives of this dissertation are as follows:

1. To examine the factors responsible for changes in Indo-Russian defence relations after the collapse of the Soviet Union,
2. To discuss in detail the major arms imports from Russia,

3. To examine India's diversification of defence and foreign policy relations in the US dominant security environment and how it shaped the defence relations of the two nations, and,
4. Finally, to account for the recent initiatives taken by the two nations not only to revive the defence relations but also to elevate it to the level of joint ventures (for commercial purposes).

Chapterization of the Dissertation:

The study is structured into five chapters. This first chapter comprises of an introduction of my research work in addition to the listing of the key objectives. It has also described the context and scope of the research along with the research methodology.

Chapter 2: Review of literature.

This chapter describes thoughts of various political scientists with regard to India's relations with the Soviet/Russia during cold war and post cold war years. The first category of opinions had laid their focus on the strategic aspect of Indo-Russian relations. How India was important for Soviet/Russia and India's preference for Soviet, then Russia, as its important ally. The subsequent part of the chapter highlights the defence ties between India and Russia. The changes in foreign policies of both nations had effected the military cooperation. Still Russia remained India's preferred partner in arms trade.

Chapter 3: Evolution of Indo-Soviet Defence and Strategic Relations.

This chapter highlights the defence and strategic relations between the two nations during the cold war. India went too closer to Soviet Union that often its policy of non- alignment was alleged as irrelevant. Defence relation remained a major sector in the bilateral relationship as a result Russia became a primary supplier of arms to India. This chapter thus brings to the surface how both the nations benefitted from this relationship especially in defence sector.

Chapter 4: Diversification of India's relations and its Impact on Indo-Russian defence Relations.

The first part of this chapter highlights the impact of the disintegration of the Soviet Union and the end of the cold war. As a result the defence cooperation declined and created problems for the supply of spare parts to India's defence equipments of Soviet/Russian origin. India went to other suppliers for the fulfillment of its defence requirements.

Russia compelled by its breakup had to take financial help not only from the western countries but also from institutes such as the I.M.F. and World Bank for its economic and political restructuring. This resulted in diversification of Russia's foreign relations which was earlier dominated by the Indian presence. Also, the disintegration led to the erosion of the Russian defence industrial base which resulted in decreased sales to India and other nations.

In the second part of the chapter I will discuss the restoration of defence relations including joint military exercises that boosted the defence relations are examined in detail.

Chapter 5: Indo-Russian Joint Ventures: An Attempt to Revive the Defence Relations.

This chapter analyses the recent attempts made by both the countries to revive their strategic partnership through Joint Ventures first for strategic purposes and subsequently with the objective of commercial purpose. Although the decline in the defence cooperation in conventional arms but still both the nations recognise each other importance and mutual trust that they share.

Conclusion.

It is summary of whole dissertation, Indo-Russian defence cooperation, 1991-2011. An attempt to present the findings, observations and suggestions.

Chapter-2

Review of Literature

Ample of literature is available on Indo-Russian relations. There are numerous books, research papers and articles on Indo-Russian strategic relations especially in defence sector. Though I went through various papers, articles, journals etc. related to the relationship of India and Russia, most of them highlight the strategic and defence ties very elaborately. Most of the literatures hold the perspective that defence cooperation between the two countries is of strategic importance. As it constitutes one of the important aspects of the bilateral relations between India and Russia.

India's relations with the Soviet Union improved after the death of Stalin in 1953. The leadership of both the countries tried their best to improve the relations especially in the defence sector. The Cold War compulsions and India's strained relations with both Pakistan and China forced India to come closer with USSR strategically. The two nations were so much strategically aligned to each other that often India accused of allying with the Soviet camp and also its non-alignment policy was questioned and criticized worldwide on account of this following pro-USSR policy. Defence cooperation between India and USSR reached its zenith during 1970's, when the Treaty of Peace, Friendship and Cooperation was signed. India tested its first nuclear test in 1974 which was criticized by most of the nations except Soviet Union. However, after the collapse of the USSR the new Russia has adopted a pragmatic realistic approach that replaced the ideological one, which as a result declined the defence cooperation between India and Russia. With the passage of time, both the countries redesigned their foreign policies to prioritize relations with each other. Russia itself was dependent to recipient countries (India and China) for arms sales. It was a kind of situation of dependency to each other i.e., Russian defence companies required hard currency for their survival while at the same time India required spare parts of Russian equipments and arsenals for modernization of defence technology. Therefore, Russia remained an important and major arms supplier of India. In the twenty first century defence cooperation is not limited to buyer seller relations but went into new levels of cooperation such as joint ventures which

include cruise supersonic missile (BrahMose), fifth generation aircraft etc. The above statement has been supported by different authors such as Robert C. Horn, V. N. Khanna, Baidya Bikash Basu, Ranendra Sen, Rajan Harshe, Stephen Foye, B. M Jain, V. H. Pant, P. Stobdan, Achin Vanaik, Jyotsna Bakshi, Arvind Mahapatra, Rod Thornton and Tsan representing four different schools of thought.

The first school of thought describes the strategic importance of India for Soviet Union and vice- versa during the Cold War period. The relations between New Delhi and Moscow strengthened due to Pakistan's alliance with United States and China's strategic proximity with Pakistan. Thus two countries came closer for mutual national interests. **Robert C. Horn (1982)** opines that India's importance increased through its policy of non-alignment. India played a significant role in South Asia and consequently in the world politics. Soviet Union saw India an important partner to contain US domination in the region. **V. N. Khanna (2007)** in his book 'foreign policy of India highlighted USSR's interests to deepen its defence ties with India which was substantiated by the Soviet Prime Minister Bulgarian's speech, while addressing to the members of Indian Parliament. He said, "We are willing to share with you our economic and scientific *technology*". India thus got a trustworthy ally in the initial years of the Cold War. The strategic closeness was further explored by **Dietmar Rothermund, (1969)** in his article, India and Soviet Union. The author points out the convergence of foreign policies of India and Soviet Union for common mutual interests and strategic gains. Therefore, Pakistan's alliance with United States, Chinese nuclear explosion, US diplomatic policies in South Asia compelled them to come closer. He concluded that India has been actively supported by the Soviet Union in many instances such as India's war with Pakistan, Kashmir issue and security threat from China and even the US. The relations between India and Soviet Union were strengthened due to India's adoption of planned economy which was similar to Soviet model, inclined Soviet Union towards India. Thus, there are compelling reasons for further cooperation of the two countries in spite of occasional misgivings. On the basis of these arguments of various authors, it can be concluded that the external factors have played a crucial role to bring both the countries more closer.

A uniformity of views was also expressed by **Anuradha M. Chenoy (2008)**, in her paper, *India and Russia: Allies in the International Political System*. She is of the opinion that Indo-Russian bilateral relations are embedded in a history of trust, mutual compatibility and mutual interests that have few parallels. The author has highlighted the relations between these two countries in the light of recent trends in global politics. India has consistently voiced the concerns of the developing countries as a leader of the non-aligned movement and played a positive and constructive role in international politics. She concluded in this paper saying that at the stage of 'take off' as a developing country, India needs a trust worthy partner and Soviet Union was seen a reliable friend. And both the countries supported each other and expressed the same views in the international fora during the heightened Cold War geopolitics.

A sub branch of this school of thought has brought to surface a major rationale for Indo-Russian alliance in the international system. The Soviet leaders were conscious that USSR could not attain her cherished ambition of being recognized as a global power without a strong position in the South Asian region and consequently in the third world politics. Soviet Union deliberately decided to shift its focus to South Asia because of geographic proximity. Geo-strategically, the importance of the region was recognized by the policy makers of Soviet Union, because of its location between Central Asia and South East Asia. Soviet Union, henceforth, viewed India as a trustworthy friend in order to hold its strategic influence over South Asia, energy rich Middle East Asia and the Northeastern countries of Asia. It considered that India as a most important nation which would facilitate to maintain its strategic hold over these regions. Therefore, as the Cold War progressed, the region obtained higher priority in terms of security and politics.

Buzan (1986), pointed out in his article, *South Asian insecurity and great powers* that most of the strategic thinkers perceived that Soviet Union's relationship with India being primarily based on the shared perception of insecurity on account of the Cold War geopolitics. India and the USSR faced problems during the late 1980's. Soviet Union was on the verge of losing east European countries. According to 'Sinatra Doctrine' East European countries were now able to go their own way

politically and economically without fear of invasion by Soviet troops. And the same perception was also supported by **Devendra Kaushik (1992)** and **J. S Peter (1993)**.

But after the demise of USSR, uncertainty in the defence cooperation was inevitable. The Cold War politics pacified. Bipolarity came to an end. The ideological differences faded. With the introduction of LPG, defence cooperation pushed back and the economic cooperation started ruling the whole world. In such scenario, the defence cooperation between both the countries also not remained unaffected. Both the nations adopted a new approach in their foreign policies and believed in supra national organizations such as United Nations Organization, World Trade Organization, World Bank etc.

The second school of thought comprised of B. B. Basu, Ollapally, K. Kataev, Ranendra Sen, Golotyuk, Rajan Harshe, Stephen Foy etc. focused on transition phase of Indo-Russian relations, disintegration of Soviet Union, emergence of CIS and the end of Cold War. The introduction of Perestroika and Glasnost by President Michael Gorbachev affected the defence cooperation between India and Russia. On the other hand, India liberalized its economy and a new approach was adopted which was modeled with the Western one. It was thus natural that defence cooperation declined, India then felt need of Soviet/Russian military spare parts for modernization and expansion of its defence industry.

Baidya Bikash Basu, (1998) describes, in his article India-Russia Military-Technical Cooperation: Structures and Processes, Post Cold War Dynamics. He analyzed that changes in policies, institutions and military technology exports to India affected bilateral defence ties. Russia's share of global arms market dropped from thirty-two percent in 1989 to eight percent in 1994 and the same view was also supported by **Ollapally (1998)**. Indo-Russian strategic relations: New choices and constraints. Consequently, the percentage of Indian arms imports from Soviet Russia has also declined considerably.

The break-up of the Soviet Union forced Russia to adopt new policies. As a result of this, the new Russian leaders forced to look at exports of weapons and military technology in a totally different way, driven largely by commercial interests. The arms were sold on economic basis that replaced ideology and friendly cost. Director General of Russia's Military Industrial Complex opined that "*Economics dictate the routes of trade*". **K. Kataev (1999)**, highlighted that economically devastated Russia turned towards West for economic assistance and extended military-technical cooperation with those countries. The new leadership of Russia became more and more Eurocentric and Atlanticistic. **Ranendra, Sen. (2011)** in his paper, *The evolution of India's bilateral relations with Russia* admitted that uncertainty and economic turmoil in Russian Federation led to bottlenecks in production, supply and marketing of defence products. Manufacturing units of arsenals scattered in other newly independent states of USSR such as in Uzbekistan, Belarus and Ukraine. In such condition, defence cooperation remained at the low ebb during this phase.

Golotyuk (1996) analysed in his paper that India became more apprehensive regarding its reliability of arms supply because of Russia's less allocation to its defence industry on account of its economic crisis. Majority of weapons of India were of Soviet Russian origin. India was in a position in which 70 percent of army armaments, 80 percent of air force and 85 percent of navel arms were Soviet produced were in the Indian inventory. Under such circumstances, India faced an immediate crisis regarding the procurement of weapons and spare parts. Therefore, the inability of Russia to continue the earlier flow of military hardware coupled with the sharp reduction in Indian military expenditures weakened the primary bond that had earlier linked India and former Soviet Union. **Rajan Harshe, (1998)** in his article, *India and Russia in a changing world*, argues that the change in international relations in the post-Cold War years has affected Indo-Russian relations. A shift in their foreign policies declined military and Strategic relations, both the countries are devising new modes of survival in the changed climate.

During this phase of economic crisis of both the countries, supply of armaments and spare parts did not take place. Apart from this, there were many other factors such as the Rupee versus Rouble debate, disagreement over the nature and the exchange rate of the currency affected the defence cooperation between both the countries. The Rupee-Rouble exchange controversy and the cancellation of the Glavkosmos deal for cryogenic engines by Boris Yeltsin under US pressure created doubts about the reliability of Russia as a potential arms supplier **Anita (1995)**.

A sub section of this school of thought points out that; Russia wanted to build close relations with the West and Yeltsin's visited a number of countries in the hope of receiving economic aid to bail out Russia from economic crises. His expectations declined when the West imposed conditions reneged for fulfilling aid pledge. **Jain (2003)** in his article, India and Russia: Reassessing the Time-Tested Ties, puts it as one of the reasons that Yeltsin refused to agree on the question of NATO's role in Baltic and Balkan regions. A uniformity of views are found in 'A hardened stance on foreign policy, *Transition*' by **Stephen Foye (1995)**, Yeltsin's attraction with the West diminished as he realized that the United States and its Anglo-Saxon allies were not reliable partners. Thus, Stephen Foye concluded that it marked the end of initial engagements of Russian leadership with the West countries and realized that India was a reliable partner and consequently restructured its defence and strategic cooperation with India.

The third school of thought laid its focus on the stabilization of Indo-Russian defence relations in the emerging new world order. Both India and Russia felt reciprocity of needs. It was, therefore, natural that if Russia stopped its arms supplies to India Western countries especially United States would capture the big Indian arms market for its economic and strategic purposes. To contain the US dominance in defence sector, Moscow offered India MiG-31 aircraft and SU-28 fighter bombers to counter the sale of French Mirages and US F-16 to Pakistan. **B. M Jain, (2003)** opines that, the treaty of 'Friendship and Cooperation' was signed between New Delhi and Moscow which was to be valid for twenty years. Russia cleared the backlog of

supply of military spares parts other equipment's and offered seven year credits at five percent interest rate. **Ramesh Thakur (1993)**, admitted in his research paper, The impact of Soviet collapse on military relations with India, that Russia intended to grant eight hundred thirty million Dollars' worth of credit to India to finance programmes for the construction of aircraft, ships and tanks under agreements signed between India and the FSU. The author concluded that Gennadii Burbuli (Russian Secretary of State) acknowledged that Russia had inherited considerable obligations towards India in the areas of defence, deliveries of spare parts and military armaments. He assured that New Delhi would be remained as priority for Russian foreign policy, especially in the defence sector. India and Russia signed the famous 'Moscow Declaration' in the direction of enhancing strategic cooperation through combating international terrorism.

In this paper, India Russia Strategic Partnership: Common Perspectives, **Stobdan (2010)**, argued that reciprocation was shown on the part of both the countries to restore the defence ties. India finalized an agreement for the purchase of twenty MIG-29M (combat) and six MIG-29UM (training) Fulcrum multirole fighters, as well as a related spares and support packages the total deal being worth four hundred sixty million US Dollars. Similarly, Russian leadership undertook high level visits to India to reciprocate the gesture on the part of India. Moscow offered to help in the construction of nuclear reactors as well as resupplying spare plants to India.

A sub section of this thought laid their emphasis on the nuclear dimension of Indo-Russian ties. India tested its nuclear test (Pokhran-II) in 1998 which was criticized by most of nation even India was being Imposed sanctions. Russia though condemned India's nuclear test but in a more subdued way. Russia fully shares New Delhi's stance that it would first needed to build a national consensus before signing the Comprehensive Test Ban Treaty (CTBT). **Mohan, C. Raju (2001)**, in his article India Russia to discuss nuclear issue points out that Putin refused to pull out nuclear assistance to India even in the face of mounting US pressure. He reassured India that Russia would not withdraw its promise of assisting India in developing its nuclear energy sector. **Ashley J Tellis (2005)**, in his book, India, Emerging Nuclear Power.

Focused on the strategic aspects of India's nuclear program and how Russia assisted India in the development of nuclear energy sector. India started the missile development program in 1962 and of late Russia has also started cooperating with India in missile technology.

The international non-proliferation agreements like the Nuclear Non-Proliferation Treaty (NPT) and the Comprehensive Test Ban Treaty (CTBT) were not signed by India on the grounds of being discriminatory. India thus had developed the nuclear weapons in 1998 was criticized world over and was being sanctioned except Russia. General Secretary of the Communist Party Gennady welcomed the Indian nuclear tests. Gennady lauded India's determination in continuing its nuclear weapon programme despite US pressure **Achin Vanaik (1998)**. During the same period Moscow had even assisted New Delhi in the construction of two nuclear power plants at kundakulam in Tamil Nadu with the capacity of one thousand megawatts each. A uniformity of views are found in *Nuclearisation of South Asia and the Future of Non-Proliferation* **Nazir Hussain (2007)**; **Sharad Joshi (2007)**, *Nuclear Proliferation and South Asia: Recent Trends* and in **Rajan, Arpit (2005)**, *Nuclear Deterrence in Southern Asia: China, India and Pakistan*. Despite, U.S. pressure to stop military cooperation with India the two countries extended the long-term agreement on military technical co-operation up to the year 2010 in December 1998. This agreement envisaged shifting the emphasis from buyer-seller relationship to the joint ventures and transfer of new military technologies between the two partners.

Finally the fourth school of thought highlighted that bilateral defence cooperation between India and Russia that evolved into a new model through cooperative ventures in defence technology. However, due to many reasons such as low quality of Russian weapons, delay in the transfer of arms to India, cost escalations etc compelled India to diversify its arms sources to other suppliers such as United States of America, Israel, Germany and France. With a changing foreign policy orientation in India, the importance of arms imports from Russia may see a declining trend. Still, substantial arms imports continue to come from Russia.

Jyotsna Bakshi (2006) in her interesting paper, India Russia Defence Cooperation, puts forward that cooperation in the field of defence is an important feature of Indo-Russian bilateral ties. However, global market made changes in the bilateral relations as well diversification of acquisition of arms by India. Jyotsna Bakshi concludes that owing to the past friendship, Russia will remain a major partner of India if not in conventional weapons but, Joint development and production of new weapon system could become crucial for maintaining Indo-Russian cooperation in the future. **Arvind Mahapatra (2006)**, Indo-Russian Defence Cooperation: Emerging Issues and Trends; **Cameron (2009)**, Phoenix from ashes and **Foshko** holds similarity of views with regard to Indo-Russian defence cooperation.

A sub section of this school of thought implied that though defence cooperation reached at higher level but due to many factors the military ties declined such as India's diversification of arms from other countries, development of indigenous defence industry, lack of quality in Russian defence technology etc. **Richard Weitz, (2012)** pointed out that; Indian defence firms have found it difficult to manufacture major indigenous weapons systems such as submarines, tanks or combat aircraft. Russia has sought to meet Indian demands and transferred more defence technologies to India and in line with Moscow's increased willingness to import weapons and co-produce them, engaged with India in more joint research, development, and production of new military systems. Russia's defence industry needed foreign sales to get economies of scale and sustain a manufacturing base that remains excessive for meeting Russian domestic demand. India has an enormous legacy of Soviet-based weapons that it needs to modernize, upgrade, and replace. Thus he concluded that recurring problems with some Indian purchases along with India's changing geopolitical orientation could eventually displace Russia's pre-eminent status in India's arms purchases.

Gulshan Sachdeva, (2011) analysed that; except for a brief period in the early 1990s, India's relations with Russia have been based on mutual trust, friendship and confidence. Currently, the main pillars of this relationship are defence cooperation, nuclear power and hydrocarbons. The major challenge for both India and Russia is

how to sustain this relationship in the absence of dynamic commercial ties. Russia has provided India most advanced aircrafts, tanks, rocket launchers, missiles, frigates and submarines to India. Through licensed production of arms, missiles and aircraft, India is slowly developing its own defence industry. There have been problems in defence supplies concerning product support, increase in costs, delays in delivery of military arms and incomplete transfers of technology. Still, substantial arms imports continued to come from Russia. **Arvind Mahapatra (2006); B. B. Basu, (2008) and Scott (2011)** hold uniformity of views. With a changing foreign policy orientation in India, the importance of arms imports from Russia may see a declining trend in coming years. There was some uneasiness in Russia when India signed a Strategic Partnership with the USA in 2006, and there was talk of Russia being elbowed out as India's main arms supplier. Nevertheless, overall Russia remains an important factor in Indian foreign policy debates. Moreover, the author concludes that India's foreign policy makers believed that a strong Russia is important for maintaining a desired international equilibrium, both supporting the idea of multi-polar world order and a rule-based international system, within which India can continue its rise.

Rod Thornton, (2012), explored the recent trends in Indo-Russian defence ties. He pointed out that India had imported Nerpa/Chakra nuclear-powered submarine with the capability to launch cruise missiles. Within a few years it should take delivery of a new transport aircraft with the arrival of the Medium Transport Aircraft. Such weapons had given India the capability to be a major strategic player in the Asian region. Joint ventures between the two countries began in 1998 with an agreement to jointly develop the BrahMos cruise missile. This missile can be launched from air, land or sea platforms, has stealth capabilities, and is probably the fastest cruise missile in service anywhere in the world. The other major joint venture has been the development of a fifth generation fighter—the T-50 or, in its Indian designation, the Fifth- Generation Fighter Aircraft (FGFA) has been highlighted by **Tsan, K. F. (2012)** in his recent paper Re-Energising the Indian-Russian Relationship: Opportunities and Challenges for 21st Century. The author analysed that despite some joint ventures the two countries have rarely broken new ground in

their interactions. He says that the deficiencies in the pillars of the India-Russia relationship lie in the overly heavy involvement of the state, which accounts for more than two-thirds of the economy in both countries. The state sector alone cannot influence the development of trade, defense, energy, science and technology, or soft power in a globalizing competitive market. **Tsan** concluded by suggesting that a stimulation of the private sector, given ample incentives and privileges by both governments, is an essential part of revitalizing the strategic relationship.

Despite, the fact that India is procuring military technology to other suppliers but still the defence cooperation between India and Russia is good especially in joint development of equipment. The same is not true with the Western suppliers. One of the reasons behind this is that there is lack of historical ties in defence relations with India. Thus Russia provided India weapons of sophisticated technology to modernize its weaponry. India had imported most advanced aircrafts, tanks, rocket launchers, missiles, frigates and submarines including licensed production of arms, missiles and aircrafts.

CHAPTER 3

Evolution of Indo-Soviet Defence and Strategic Relations.

3.1 Introduction:

This Chapter traces the evolution of Indo-Soviet defence relations that has overtime culminated into a strategic partnership. Defence relations constitute one of the most important aspects of the bilateral relations of the two countries. It was during the cold war period and because of India's strained relationships with both Pakistan and China that the two nations came closer to each other. The first part of the chapter discusses the details of beginning of the defence relationship and how the two nations mutually benefitted from each other. The second part of the chapter analyses the events that took place which shaped the defence relations into strategic one. The zenith of the relationship was reached when the two nations signed the famous treaty of Peace and Friendship in 1971. The two nations were so much strategically aligned to each other that often India was accused of allying with the Soviet empire and its non-alignment policy was questioned and criticized worldwide. Till the end of the cold war and the subsequent breakup of the Soviet Union, and even thereafter, the two nations enjoy a relationship of mutual trust and friendship.

3.2 British as the earlier supplier of military equipments to India:

In British India, United Kingdom was the main supplier of arms till the time of India's independence in 1947. Under the arrangements made for the partition of India in 1947 Indian Army apportioned infantry battalions, one hundred and eighty one artillery regiments, and sixty one Engineer units. (Venkateswaran 1967: 106), points out that the Indian Navy obtained thirty two vessels including two frigates, four sloops, a survey ship, and some minesweepers. Seven fighter squadrons, one transport-communications squadron, and some miscellaneous aircraft were allocated to the Air Force. P.R., Chari. 1979: 231-232 argued that the major military equipments that India acquired up to 1962 were 180 Sherman (British), over 300 Centurion (British), and 160 AMX-13 (French) tanks. The Indian Navy procured one aircraft carrier, two cruisers, six R/Hunt-class destroyers, and eight Leopard/Blackwood / Whitby-class

frigates all of British origin. Combat aircraft obtained for the Air Force included 230 Vampires (produced in India under license from the U.K.), 104 Ouragons (French), 1829 Hunters (U.K.), 80 Canberra's (U.K.), 110 Mysteres (France), and 55 Fairchild Packets (U.S.).

3.3 Indian defence imports from West:

As India was engaged in a war with Pakistan after gaining independence, the efforts to diversify defence base were made by the then Foreign Minister Krishna Menon, who later became Defence Minister in 1957. The importance of importing defence equipments was highlighted feature of India's stained relations with Pakistan. Accordingly licenses for local manufacture of wide range of defence items such as Gnat interceptors (U.K.), HS-748 transport aircraft (U.K.), Allouette helicopters (France), L-70 anti-aircraft guns (Sweden), Vijayanta tanks (U.K.), Brandt mortars (France), and 106mm recoilless guns (U.S.) (B. R., Nanda. 1976: 115) were obtained from various countries. The import of Western defense technology and conventional weapons reflected a paucity of research in the Indian defence sector and availability of superior technology with the Western countries was the main cause of importing weapons. A list of a few imported defence equipments have been given below.

Table: 3.1 India's arms imports pre and post early independent years.

Type	Number	Supplier	Cost million Dollars	Range In kilometers
Sherman tank	180	Great Britain	6300	193 km
Centurion tank	300	Great Britain	3920	450km
AMX-man	160	France	3920	400
Aircraft carrier	1	Great Britain	68	N/A
Cruiser	2	Great Britain	94	160
Hunter class destroyer	6	Great Britain	4668	154
Frigates	8	Great Britain	N/A	N/A
Vampire aircraft	230	British License	42987	145

Type	Number	Supplier	Cost in million Dollars	Range In kilometers
Ouragon aircraft	104	France	34956	980 km/h
Hunter aircraft	182	Great Britain	141596	1141.01 Km/h
Canberra aircraft	80	Great Britain	18400	1020 Km/h
Il-14 transport	26	Soviet Union	N/A	N/A
Mystere aircraft	110	France	6600	1120 KM/h
Fair-child Packet aircraft	55	United States	N/A	351 Km/h
An-12 transport	16	Soviet Union	N/A	5700Km/h
MI-4 helicopter	26	Soviet Union	36md	N/A

Source: P.R. Chari, "Indo-Soviet military cooperation: A review, Asia Survey 19, no. 3 (March 1979).

3.4 Strengthening of Indo-Soviet relationship:

During 1947-1954 Stalin was strongly opposed to India's policy of non alignment and termed it as 'pro-western' and 'pro-capitalist' that is why Indian ambassador to the Soviet Union Vijay lakishmi Pandit failed to meet Stalin during her one year stay in Moscow (V. N., Khanna. 2007: 291).

Relations between the two countries strengthened after Stalin's death in 1953. Indo - Soviet relations were given importance in the address of G. M. Malenkov, the then chairman of the Soviet council of ministers in august 1953. He stated that:

"The position of so large a state as India is of great importance for strengthening peace in the east. India has made a considerable contribution to the efforts of peace-loving countries aimed at ending the war in Korea, and relations with India are growing stronger; cultural and economic ties including military are developing. We hope that relations between India and Soviet Union will continue to develop and grow with friendly cooperation as the keynote" (R. C., Horn. 1982: 189).

Later, Soviet Prime minister Bulgarian and communist party general secretary Khrushchev paid a three week visit to India in November 1955. This was an unprecedented event as no Soviet Prime minister had earlier gone abroad on a state visit. Both the premiers declared that all necessary conditions for bilateral trade in defence, economic cooperation between India and Soviet Union would be made available on the basis of equality and mutual benefit. On addressing the members of Indian parliament, Bulgarian stated, “We are willing to share with you our economic and *scientific technology*”. India thus got a trustworthy ally in the initial years of the cold war (V. N., Khanna. 2007: 295).

The Soviet Union’s perception of India in the context of security was shaped during the Khrushchev time period (1953-1964). The international and domestic factors that contributed in India’s favor were the US policies for the South Asia and Soviet Union and the conflicts in the South Asian subcontinent. It was due to these reasons that Soviet Union saw an opportunity to play a major role in the continent and hence came strategically closer to India. Thus, interests of both the nations were served through strategic proximity.

3.5 Importance of South Asia and India for Soviet Union:

The Soviet leaders were conscious that they could not attain their cherished ambition of being recognized as a global power without a strong position in the region and consequently in the third world politics. The South Asian subcontinent till the beginning of the Cold War lied in the periphery of its external policies. South East Asia and Europe because of geographic proximity were the focus of Soviet foreign policy. As the Second World War ended, Soviet Union consciously decided to shift its focus to South Asia because of geographic proximity.

India occupied an important stature of the Soviet Union’s foreign policy because of its unique geographic location in the subcontinent. The importance of this position increased manifold during the cold war. As no South Asian country possessed the power to ideologically challenge USA, the political will of certain countries to ally themselves with a major power hostile to Moscow created

apprehension in the minds of the leaders of Soviet Union. Thus, the Soviet authorities found India as a vanguard suitable enough through which it could play an important role in the world affairs.

Geo-strategically, the importance of the region was recognized by the policy makers of Soviet Union, because of its location between Central Asia and South East Asia. Soviet Union henceforth viewed India as a trustworthy friend in order to hold its influence over South Asia, Persian Gulf and the northern countries (Afghanistan, Iran, and Turkey). It considered India were important for its strategic and vital interests. Therefore as the Cold War progressed, the region obtained higher priority in terms of security and politics. Thus it would not be wrong to say that Soviet policies in South Asia were firm on the basis of global power politics.

The Soviet leadership wanted to limit the United States and Chinese influence in India and subsequently in South Asian region. In addition, Moscow also supported India's political, social and economic development in the direction of a planned socialist economy and a progressive polity. It found India ideologically closer to its policy because of India's adoption of a planned economy. India on its part cooperated with the Soviet Union to counter the Chinese influence. India's foreign policy thus shifted from non alignment to taking sides for its survival. India pleased Moscow by refusing to vote for the UN resolution condemning the USSR's suppression of the Hungarian uprising in the November 1956. Besides, in 1968 Prime Minister Mrs Indira Gandhi refused to vote for the UN resolution condemning the Soviet Union's invasion of Czechoslovakia (Vojtech, Mastny. 2010: 19).

Both the countries by now had become mutually dependent, though, both kept its options open for strategic relations with the other countries. The friendly relationship became a symbol in the world politics. United States and China were seen as potential threats to both Soviet and Indian security. (B., Buzan. 1986: 225) thus perceives Soviet Union's relationship with India being primarily based on mutual needs and a shared perception of security.

3.6 India's search for a strategic ally:

The relations between the two nations were shaped by US strategic inclination towards Pakistan and its strategic proximity with China. Hence erstwhile Soviet Union was seen as a trustworthy partner. Second, because of the severed India Pakistan relations and the gradual rise of China, Soviet has remained a natural ally. This was reflected in the primacy of the defense relations in their bilateral relationship.

It is a well known fact that Pakistan procured conventional military technology from the west through its military alliances under the garb of 'military assistance'. Pakistan signed a Mutual Aid Treaty with the United States which proved to be the beginning of supply of technologically advanced arms to Pakistan. India on the other hand, continued to depend upon Britain and to some extent France for the purpose of purchasing its weapons.

Consequently, cooperation in the field of defence was given an impetus. It soon became one of the most important features of Indo-Russian bilateral ties. India's major military hardware has thus been of Soviet origin. Cooperation was further deepened in the sensitive areas of defence which engendered a high level of mutual trust and broad compatibility of geo-political interests.

The available literature on the topic emphasize on two most important aspects. First, the reasons of importance of the defence sector in the bilateral relationship and second, the extent of strategic proximity i.e. moving a step ahead from a mere sale of military arms and equipments to India to the establishment of joint production facilities in India.

3.7 Emergence of Soviet Union as a major defence supplier:

In 1955 Soviet Union presented two Il-14 transport aircrafts to India. Further, twenty four Il-14s fighter jets in 1960 were sold to India. In 1961, ten Mi-4 helicopters, eight An-12 transport aircraft, and six jet engines for the indigenously manufactured HF-24 aircraft were acquired by India, and in 1962, 16 Mi-4s and 8 An-12s were acquired (G., Mishra. 1976: 120).

It is evident that these early transfers of equipment reflected increased cooperation which at a later stage was transformed in deepened military and strategic relations between the two countries. The Soviet position became clearer through the MiG-21 deal in 1960s which marked an important milestone in the Indo-Soviet military ties.

Pakistan on the other hand obtained F-104 star fighters in 1961–62 from the United States. It was in the process of gaining superiority in the Air field. To compete with this Government of India accepted the demand of Indian Air Force to purchase several fighter interceptor squadrons to achieve aircraft replacement. Under the leadership of late Mr. Krishna Menon as defence minister and the then Prime minister of India Late Pt. Jawaharlal Nehru, procurement of MIG-21 from Soviet Union was being considered to counter the air threat from Pakistan.

United States and Britain are concerned by the MIG-21 deal of Soviet Union with India. As a result, an attractive counter offer was made by U.S. to India. It offered the lightning interceptor which had a comparative advantage over MIG 21 in the context of its weight and overall quality. However, it resulted with Britain viewing this as a possible threat to the already established defence relations with India. Consequently, the US offers are rejected by India mainly because of British reluctance to permit the manufacture of the aircraft under license in India.

Finally an agreement was reached in August 1962 for purchase of twelve MiG-21s as well as the manufacture of the aircraft under license in India. However, the deal was not materialized and later in the same year India was engrossed in the Sino-Indian war.

Thus an arms race was initiated in the South Asian subcontinent with both the Soviet Union and United States proving to be major defence equipments suppliers in the continent.

3.8 The 1962 Sino-Indian war and a disillusioned India:

During the Sino-Indian border conflict of 1962, India's then Defence Minister Y.B. Chavan first turned to the United States for military assistance. However, the American response was discouraging. First, India was advised to strengthen its economic base; Second, the United States explicitly stated that India did not possess the technical skills to handle American naval equipments; and finally, the United States clearly stated that any military deal including the possible jet aircraft deal would be made possible only if the payment to be made by India would be in Dollars. United States was also not responsive to the navel requirements of India (S. N. Varma. 1999: 54).

The then Defence Minister Y.B. Chavan offered to borrow on payment three Darling class destroyers from United Kingdom. However, he was offered three Weapon-Class mothballed destroyers which were not in tune with the India's purposes. Thus, India received a negative reply from the United Kingdom. France on the other hand was also not sympathetic in providing the necessary military assistance to India (B. R., Nanda. 1976: 145-146).

The defeat of India in the 1962 war and the subsequent death of Nehru shattered the Indian confidence about its long term security. India was thus disillusioned with the west. Under such circumstances, the only major arms producing nation towards whom India could have turned was the Soviet Union. The latter was hence seen as a viable option for meeting India's security requirements. As a result, India had a sequence of negotiations with the Soviet Union for the purchase of the necessary items of the defence equipments needed by India. This phase was marked by the exchange of high level military delegations between the leaders of the two nations.

The two years (1962-1964) delay in concluding the MiG deal was marked by a decline in Sino-Soviet relations. First, it appeared that in 1962 the Soviet Union was not fully ready to transfer these warplanes, but only intended to open a possible future option of Soviet defence market. It therefore did not proceed beyond expressing a

statement of intent. Second, the Soviet Union had reservations about India's technological ability to manufacture an advanced jet aircraft. Third, it appears that the China factor was more significant in Soviet perceptions. By this time It has thus been perceived by Arthur Stein (1969), in his article, *'India and the Soviet Union: The Nehru Era'* that:

"While the Soviets had accrued advantages from their courtship of India over the previous decade, the prospect of moving even closer to India in the coming years had potential disadvantages that could restrict Soviet manoeuvrability, particularly vis-a-vis China. Yet the U.S.S.R. had made a public commitment to build the MiG factories and it would have been extremely difficult to back down" (Arthur, Stein. 1969: 122).

Moreover from the promised deal of MIG-21 that was made with the Soviet Union, the first six were received only in early 1964. Moscow lastly agreed to transmit thirty eight MIG-21S to India (Ian, C.C.1964: 323-325) in September 1964 and provide the machinery to set up manufacturing facilities. (Harton, B. Frank 1974: 42) opined that as a result of this the only alternative was signing of Indo-Soviet agreement in 1965 to obtain frigates including submarines. Due to the above mentioned reasons and because of non-fulfillment of India's request for three squadrons from United States in May 1964, Soviet Union thus emerged as the only option left. As a result even after certain hiccups, India continued to see the Soviet as an important partner.

The threat perception from Pakistan-China proximity made India more close to Soviet Union. Pakistan's purchases of technologically advanced arms made it imperative for India to strengthen its security assets. India formulated its first five year defence plan in 1964 that exclusively focused on the diversification of its defence sources. Self reliance in the defence sector and in the economy was seen as possible solutions to India's problems. India also geared up to improve the existing military technology (such as the maintenance of 45 squadron Air Force, improvement of the

air defense radar and communication facilities) and introduce indigenous production of the defence equipments.

In an Annual Report (1964-65), Ministry of Defence. A simultaneous step was taken for replacing the outdated ships of the Navy, Improvement of road communications in the border areas, strengthening the defense production base; and improving the organizational arrangements. It was therefore, further observed in the Annual Report that:

“Weapons and equipment best suited for our conditions are available in Soviet Union. Therefore, it becomes a basic necessity to establish manufacturing capacities especially for weapons, ammunition and equipment which are required in considerable quantities by our armed force”.

However, Soviet Union remained a major defence supplier for the Indian armed forces. Defence production policy of India thus concentrated on modernization of military equipments with the Soviet support and achievement of self reliance within a non-specified short span of time. This has been supported by the table given below:

Table 3.2 India's Sources of Soviet Military Equipment, 1964-1976:

Weapons	1964-68	1969-72	1973-76
Tanks	70 Sherman (U.K)	50 AXM-13 (French)	400 Vijayanta (Indian)
	50 Vijayanta (Indian)	250 Vijayanta (Indian)	450 T-54/T-55/T-62 (SU)
	100 PT-76 (Soviet)	50 PT-76 (Soviet)	N/A
	400 T-54/T-55 (Soviet)	50 T-54/T-55 (Soviet)	N/A
Navel Vessels	1 F-Class Submarine (soviet)	3 F-class Submarines (Soviet)	2 Osa-Class Patrol Boates (Soviet)

	1 Petya-Class Frigate (Soviet)	4 Petya-Class Frigates (Soviet)	5 Petya-Class Frigates (Soviet)
Combat Aircraft	4 MIG-21 Squadrons (Soviet)	4 MIG Squadrons (Soviet/Indian)	2 MIG-21 Squadrons (Indian)
	2.50 Gnat Squadrons (Indian)	4.50 Gnat Squadrons (Indian)	1 Gnat Squadron (Indian)
	0.50 Su-7 squadrons (Soviet)	6 Su-7 Squadron (Soviet)	2 HF-24 Squadrons (Indian)
Other Important Soviet Equipment	100mm.guns 130mm.guns SA-2 SAM Mi-4 helicopters	OT-62 APC Mi-8 Helicopters More SA-2 SAM Mi-4 helicopters	OT/62/-64 (2a) APC ZSU-23-4 SPS

Source: Data derived from, P. R. Chad, "Indo-Soviet Military Cooperation: A Review," Asian Survey 19, no. 3 (March 1979): 237.

3.9 Indo-Soviet friendship treaty of August 1971:

The Indo-Soviet friendship was at its peak in the early 1970's when India confronted Pakistani excesses in the East Pakistan. The Soviet unilaterally supported India when the West rejected Indira Gandhi's plea for help. The zenith of Indo-Soviet political cooperation was reached during the 1971 war. The Bangladesh liberation struggle broke out at a time when Richard Nixon and Henry Kissinger were engaged in forging a new strategic relationship with China. The then Pakistan President Yahya Khan was serving as a secret channel of communication between the American and Chinese leaders and was duly rewarded for his efforts by the creation of a Washington-Beijing-Islamabad nexus aimed against India during the 1971 war.

Thus, the contextual imperatives from the Indian side were US-Pakistan military alliance and aid, Indo-US estrangement, the Sino-Pak strategic relationship

and the Sino-Pak-US strategic convergence. On the Russian side the imperatives were Sino Russian military confrontation of 1969, the Sino-US quasi - strategic relationship of the 1975-1980 and the Russian need to expand its area of influence and in the third world countries through India.

Soviet Foreign Minister Andrei Gromyko visited India on 9 August, less than a month after Kissinger's trip to China and both signed a twenty year Treaty of Peace, Friendship and Cooperation. The primary elements of the treaty were Articles VIII and IX which emphasized, respectively, that each nation

"shall not enter into or participate in any military alliance directed against the other Party," and that each would "abstain from providing any assistance to any third party that engages in armed conflict with the other Party" (B. Prasad. 1979: 393).

The Treaty of Peace and Friendship in 1971 was the cornerstone of the strategic relationship between India and Russia. The basic and common objectives on both sides were to containment of China and Pakistan to limit the role of the US to some extent. There were two main pillars of the Soviet-Indian relationship of mutual interest - the containment of China and the reduction of Western influence in the region (P. Zwick. 1990: 317).

Western powers viewed Indo-Soviet Treaty as an evidence that India had shifted towards the Communist bloc but India's then Prime Minister Indira Gandhi negated it and stated that it was not a reversal of the Indian non alignment policy. Analysis of the article IX shows that declaration covers all aspects of strategic relations. "In the event of either Party being subjected to an attack or a threat thereof, the High Contracting Parties shall immediately enter into mutual consultations in order to remove such threat and to take appropriate effective measures to ensure peace and the security of their countries" (B. Prasad. 1979: 395).

Therefore, the strategic isolation and denial of the necessary military requirements that India experienced as a result of the Sino-American-Pakistani nexus provided a boost for further Indo-Soviet military cooperation. The domestic political

upheaval in December 1970 led to the civil war which eventually led to the systematic attacks on the Hindu population in East Pakistan in March 1971. This culminated in the influx of refugees on the eastern border of India. It led to a human rights crisis resulting in the death of one million civilians as well as ten million refugees being displaced into the Indian Territory. The 1971 India Pakistan war was started over this issue and because of the geo-strategic significance of the treaty India acquired the necessary 'protection'. Hence, this treaty served as India's strategic savior in the background of Pakistan's strategic relations with U.S and China.

3.10 Indo-Soviet defence cooperation during Indo-Pak. war of 1971:

On 3 December 1971 Pakistan launched preemptive air raids against India. India retaliated by launching counterattacks in East and West Pakistan. After Pakistan's defeat in the war, India recognized Bangladesh as a sovereign nation.

Though the war lasted only for thirteen days, yet, international response from the major powers clearly proved that in the near future India would have to help herself. The United States blamed India directly for escalating the tensions in the South Asian subcontinent and consequently hardened its stance. It dispatched its seventh fleet of ships from off the coast of Vietnam to the Bay of Bengal. China also favored Pakistan.

It was help only from the Soviet quarters that India was able to withstand the pressures from the international community. Soviet Union sent its fleet of naval ships to counter any possible move by the United States against India. The sailing of the USS Enterprise was a symbol of insult and would be remembered by the South Asian countries as a possible nuclear as well as a military threat. The strategic and military help that was extended from the Soviet through this treaty boosted the Indo-Soviet relations. And it gave India an impetus to achieve her main goal of becoming the region's hegemonic power (G. Tanham. 1992: 139).

Soviet leaders exulted that for "the first time in history the United States and China have been defeated together" (B. Buzan. 1986: 225). The realist (B. Karnad. 1998: 310-313) has argued that because of the treaty, India "plugged into the vast Russian military machine" and thus "for all intents and purposes, came under Soviet nuclear protection." However, because the extent of Moscow's commitment was by no means obvious, he and other advocates of India's own nuclear deterrent have also cited the alleged U.S. threat as a rationalization.

3.11 India's Nuclear Explosion of 1974 and Responses of Major Powers:

China had already conducted its nuclear test in 1964. India was asked to sign the Nuclear Non Proliferation Treaty (NPT) in 1968 to which it refused. India's refusal came despite guarantees in the treaty and repeated assurance from big major powers that India's security would be taken care of. With the Nixon Chou summit early in 1972 and the possible strategic relationship between Pakistan, China and Russia; India began to consider about Moscow's long term commitment as New Delhi's protector. Also, the advent of Detente¹ shifted the focus of Soviet Union from India to other countries and improving its economy.

Immediately after the victory in the 1971 war and due to the changed international security environment, India sought to materialize the situation. Thus, the then Prime Minister of India Mrs. Indira Gandhi authorized India's Atomic Energy Commission (AEC) to conduct a Peaceful Nuclear Explosion (PNE) on 18 May 1974². This was seen as India regaining its status as an important regional player i.e. it

¹ Détente is a French word meaning relaxation and to ease of strained relations, especially in a political situation. The term is often used in reference to the general easing of relations between the Soviet Union and the United States. In the Soviet Union, détente was known in Russian as *razryadka*, loosely meaning 'relaxation of tension'.

² In a 1991 book and a 1997 conversation, Raja Ramanna, the "architect" of the Pokhran I test, debunks the notion of a PNE and suggests that Pokhran I was in fact a test of a nuclear weapon. See Toby F. Dalton, "Towards Nuclear Rollback in South Asia," 17. The argument that Pokhran I was motivated by more than "peaceful" purposes is also supported by the fact that Prime Minister Indira Gandhi, who authorized the PNE, planned additional tests in 1982-83 that were canceled due to U.S. pressure. See Mattoo, 18, and "The Nuclear Journey Through Various Governments," India Today (25 May 1998). Available on-line: www.indiatoday.com/itoday/25/09/2012/march.html.

enhanced India's stature as a leader in Asia, in the third world and amongst the non-aligned countries. India because of its nuclear test tried to come at par with China.

The nuclear explosion signaled that India had options in its foreign policy beyond its relationship to the Soviet Union. It proved that the United States- Soviet détente and United States-Chinese rapprochement could not serve to deny India its legitimate interests in the world affairs. India's goals were not going to be sacrificed to the furtherance of any normalization among the external powers had thus symbolically demonstrated its continued independence, even from Moscow. India tried to turn the tide in its favor through the tests and tried to assert that it would not be dependent on major powers against a possible Chinese threat. India had understood in the due course of time that it was very important for her to be independent when it comes to security issues. Finally it can be said that through the tests it tried to carve out a place for itself in the world politics.

Though the detonation greatly increased tensions in the subcontinent and complicated India's relations with the major powers. Pakistan's reaction was particularly vehement; U.S and China also expressed their considerable concerns. Soviet Union responded by temporarily recalling its ambassador from New Delhi on account of political considerations. The reactions of both the US and Soviet Union revealed how protected they were with regard to the knowledge of nuclear energy and its application for military uses. Also, another reason as to why Soviet was apprehensive of Indian nuclear tests was a possible decrease in future security dependence on itself.

Another dimension that emerged because of the Indian nuclear explosion (1974) was the issue of arms race in the South Asian continent. India's nuclear tests represented a further proliferation of nuclear knowledge and its possible use in nuclear weapons to which Soviets had long been opposed. The 1974-1976 was critical in the transformation of the security environment in South Asia and of Soviet-Indian relations. Unlike the U.S. Soviet process of arms control, developments in

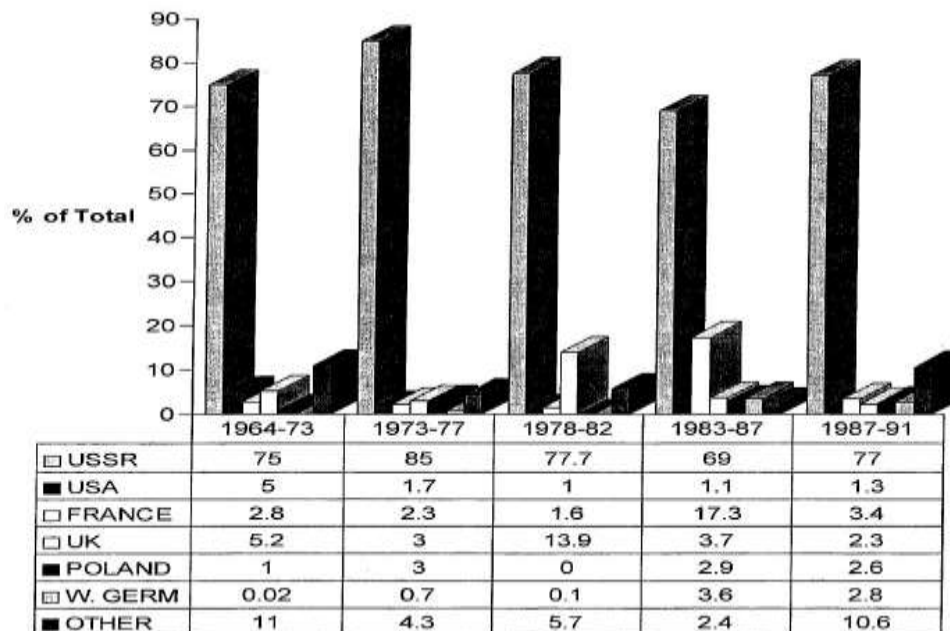
South Asia had the effect of multiplying military conflicts, raising the prospect that the region would become the world's first nuclear battlefield. At the same time, Soviet-Indian relations became increasingly disconnected from the East-West rivalry and instead influenced by India's worsening domestic strife, which was difficult for Moscow to understand in Marxist terms.

3.12 India's Defence Procurement Diversification, 1978-82:

Though India made a place for itself through the nuclear explosion but it also made a simultaneous attempt to diversify its sources of defence equipments. One of the major shortcomings that emerged during the 1971 Indo-Pak war was the lack of technologically advanced fighter planes in the Indian Air force. Pakistan was supplied Mirage-3s by the US. The Soviet made SU-7B jets and indigenous Marut (Raju, Thomas. 1980: 88) were of no match and consequently the Indian radars were completely unable to detect them. This resulted in a large number of casualties on the Indian side. India thus decided to go for modernization of its defence equipments.

(Salamat, Ali. 1983: 96-97), opines that from an economic point of view India became disappointed with the Soviet Union due to a growing surplus in non-convertible of Russian rubles in the international market. Hence India decided to diversify its defence suppliers along with the modernization of its weapons technology. This resulted into major arms procurement deals in the late 1970s France and Great Britain, the US and other countries. However, still Soviet Union remained as India's Primary arms supplier. This is explicit from the table given below.

Figure 3.1: Sources of Indian defence procurement from 1964-1991.



Source: Data derived from, World Military Expenditures and Arms Transfers, 1963-1973: 71. World Military Expenditures and Arms Transfers, 1968-1977: 156. World Military Expenditures and Arms Transfers, 1972-1982: 98. World Military Expenditures and Arms Transfers, 1988: 114. World Military Expenditures and Arms Transfers, 1991-1992, 134 (Washington, D.C. Arms Control and Disarmament Agency).

3.13 Nuclear Non-proliferation Act of 1978 and Indo-Soviet Relations:

Indo-Soviet military ties deepened during the late 1970's in the background of emerging rifts in the relations between India and the United States. This was the same period when the process of Détente was initiated. Under it, the two superpowers decided to control the spread of nuclear knowledge. Nuclear Non Proliferation was hence one of the basic objectives of foreign policy of Carter administration in 1977. United States Congress in 1978 passed the Nuclear Non Proliferation Act (NNPA). Enactment of the Nuclear Non-Proliferation Act in 1978 required the United States to cut off enriched-uranium fuel exports to the developing countries and place all its nuclear facilities under inspection of the International Atomic Energy Agency (IAEA) (S. Paranjpe. 1989-90: 189).

Consequently, in the same year General Electric of USA (reactor supplier at Tarapur nuclear plant) had cut off all links with India on account of complying with the above act. The latter was denied enriched uranium. This was the period when the relations between India and USA were at its lowest ebb during the Cold War period. Further, in accordance with its nuclear non-proliferation policy (during the détente period) cut off its entire military aid to Pakistan through its Foreign Assistance Act, Section 669 (S. Paranjpe. 1990: 189). However, the relations between the Soviet Union and India during the détente period continued to enjoy the same warmth as before. During this period Soviet Union didn't take any concrete steps to curtail India in going ahead neither with its defence modernization nor with its nuclear energy programs.

3.14 The Soviet Invasion of Afghanistan:

The appearance of a uniform American nonproliferation stance in South Asia came to an end as the Soviet Union invaded Afghanistan on 23 December 1979. According to Cronin that Moscow's December 1979 invasion of Afghanistan and with the revival of cold war politics, the United States lifted its sanctions from Pakistan in order to contain the Soviet expansion (P. R., Cronin. 1988: 113).

The American Intelligence (CIA) established an arms nexus through Inter-Service Intelligence (Pakistan Intelligence Agency) and called them as freedom fighters of Afghanistan or the Afghan Mujahidin. This move categorically initiated the US and Pakistan's cooperation in the rise of Violent Non-State Actors (VNSA) (Smith, C. 1995: 587-588). Pakistan under the Symington amendment received military aid for a period of six years, worth 3.2 billion US Dollars from the US (M. Reiss. 1995: 211). Thus, the defence and strategic relations between US and Pakistan gained new dimensions. It had a direct and overreaching impact on the security interests of India. This necessitated an escalation in India's military expenditures and arms procurement during the 1980's. However, in a move to console India the Reagan Administration arranged for France to replace the United States as a supplier of fuel for the Tarapur reactors (Shrikant, Paranjpe. 1989-90: 189).

However, India was still apprehensive about the United States. Experts criticized the Washington's decision to lift its earlier embargo on the arms sales to Pakistan. They viewed it worse than the Soviet move. Despite repeated attempts by President Carter and United States ambassador Goheen to convince India that new arms for Pakistan would only be to contain the Soviet intervention along Pakistan's borders, New Delhi clearly viewed this move as a threat to the India's security and extension of US interests in the South Asian Region (V.D., Chopra. 1985: 134).

Bergen Peter (2001), in his article '*Holy War*' held the above view and his work highlights that 'Operation Cyclone' was the code name for the United States CIA program to arm and finance the Afghan mujahidin during the Soviet war in Afghanistan (1979 to 1989). The program leaned heavily towards supporting militant Islamic groups that were encouraged by Pakistan rather than the less ideological Afghan resistance groups that had also been fighting the Marxist-oriented Democratic Republic of Afghan regime since before the Soviet intervention. United State's unofficial funding to the militant groups based in Pakistan began with Dollars 23 million per year in 1980 and rose to Dollars 630 million per year in 1987. Additionally, the US supply of arms to Pakistan militants made serious concerns to India's security. It was thus the US that was responsible for further damage of Afghanistan. It has been proved in the recent years that more harm was done to Afghanistan, India, Russia (post Soviet breakup) and to the other nations of the world through the strengthening of these groups and with the subsequent emergence of Taliban Regime.

W. Howard Wriggin's (1984) in his research paper '*Pakistan's Search for new Foreign Policy After the Invasion of Afghanistan*' stated that on 23 December 1969 the eastern bloc Soviet Union invaded the Afghanistan and made Babrak kamal in Afghanistan as a leader of Soviet choice in place of Hafizullah Amin. Thus a Soviet backed government was established in Afghanistan. It was for the first time that Warsaw pact went beyond its jurisdiction. Soviet occupation in a country which lasted for a long period of time had been recognized as a buffer state between the Soviet

empire and the powers of South Asian region. The geostrategic circumstances had already disrupted by the revolution in Iran which had driven out the Shah of Iran and brought in a band of religious extremists who quickly dismantled the Shah's proud army and state structure. The superpower politics in the subcontinent created insecurity in India with Pakistan already allying with the United States. Pakistan's stature enhanced overnight as it became a 'front line' country that shared a thirteen-hundred mile frontier with Soviet Union.

Pittsburgh Post Gazette of 29 January 1980 issue stated that there was a worldwide condemnation of the Afghanistan invasion by the Moslems. Foreign ministers of thirty- four Islamic countries demanded an immediate, urgent and unconditional withdrawal of Soviet troops from the Muslim nation of Afghanistan. The invasion also received criticisms from the non-Muslim countries as well.

It is important to note that India because of its important geo-political position in South Asia was keenly watching the deterioration of the situation in Afghanistan with an increasing unease. India's rapid recognition of the new Marxist regime (It was the second country to do so) in Afghanistan after the April 1978 coup was not only an indicative of its keen hopes for the return of stability there, but also, political support to the Soviet backed regime in Afghanistan. Though the much awaited recognition to the Afghan Government was given and immediately in 1980 India called for the withdrawal of the Soviet troops from Afghanistan. On the other hand, India also stated that the situation was an internal matter of Afghanistan and all powers should avoid interfering. This was because of India's commitment to the Non-aligned movement. India thus played its Afghanistan and Non-alignment card right.

The rise of VNSA saw its results in the emergence of terrorist activities in the Indian states of Jammu and Kashmir and Punjab. As a victim, India pleaded with the US on various accounts to take note of Pakistan's involvement, but, the latter had its own agendas in the South Asian region. Thus, India had to grapple with the deteriorating internal security. These factors necessitated an escalation in India's

military expenditures and arms procurement during 1980's that led to the further enhancement of Indo-Soviet military cooperation.

3.15 Indo-Soviet strategic relations and change in leadership of political parties in respective countries:

As Mrs. Gandhi's once again came to power in 1980, Soviet Union hailed the similarity of fundamental interests between the two countries as an objective factor of global importance. With Russia's relations with China going from bad to worse, the Soviet Union saw India as a possible counterweight to China as Soviet and Indian interests coincided in the Indian Ocean against the US presence (in island of Diego Garcia).

Prime Minister Gandhi wanted India to be seen as vital for the global balance but not used as anybody's balancer. She thus condoned a Soviet naval presence in the Indian Ocean but successfully resisted pressure for the establishment of Soviet military facilities in India. She simultaneously continued discussions on the border disputes with China despite Moscow's warnings that China's smiles diplomacy was a 'trick' to make its territorial gains permanent through steady normalization. However, she was cautious enough not to displease the Soviet leadership. With the Soviet invasion of Afghanistan New Delhi claimed that the Soviet intervened at the invitation of the Afghan Government.

Mansingh March (1980), in his article '*Information on Gromyko's Visit to India*', analyzed that Andrei Gromyko the then Soviet foreign minister came to India in February 1980 to seek political and diplomatic support for their presence in Afghanistan. Later in that year, Moscow extended \$1.6 billion credit to India for a period of fifteen years for military purchases. It made India one of the world's largest importers of arms. Consequently, of India's total defence budget, eighty five percent constituted of imports from the Soviet.

In September 1982, PM Gandhi visited Moscow and the relations between the two countries were discussed. Also, an intensive exchange of opinion ensued, with the two parties mutually appreciated each other. She also made simultaneous attempts to revive the Nonaligned Movement. After her assassination in 1984, the relations between the two countries received an unexpected boost through Rajiv Gandhi and the new Soviet leader Mikhail Gorbachev.

3.16 The End of the Cold War, Breakup of the Soviet Union and its Impact on India:

Mikhail Gorbachev wanted to convert the Indo-soviet relationship into a global strategic partnership based upon the model of inter-state relations for the future cooperation. United Nations Organization in its journal '*Chronicle*' (June 1985) asserted that Indian Prime Minister Rajiv Gandhi's first discussion with Moscow was 'merely professional businesslike and open'. Similarly, Gorbachev moved in the footsteps of his predecessors by agreeing to provide India with more military hardware and a billion ruble loan. But he was previously showing in his initiatives, to disarmament which were compatible with his counterpart in India.

Leszek, Buszyński. (1992: 60-61). Gorbachev and Southeast Asia. Rutledge, New York. Mentions that the idea of a 'common European house' was coined by Gorbachev to rally West European support against United State's opposition. It matched with his call for an all 'Asia forum' during Rajiv's visit to Moscow. The forum was to create joint efforts of Asian governments to develop broad approach to security in Asia. The understanding was no longer directed against China but akin to the planned European house, that excluded the United States.

Rajiv Gandhi, the then PM, left an excellent impression on Washington, awakening hopes for a new start in India's relations with the United States. However, the new start in relations with the Soviet Union was not initiated by Rajiv Gandhi but by the Soviet leader Gorbachev (Buszynski, Leszek. 1992: 60-61).

Daniel Calingaert (1991) in his book 'Soviet Nuclear Policy under Gorbachev: A Policy of Disarmament', argued that the Gorbachev embarked on a new policy of nuclear disarmament, that allowed the Soviets to divert resources to industrial modernization, restructure the armed forces, and join the global economy, thereby revitalizing their economic strength and exerting a renewed influence on international affairs. In 1987 and in 1988, Gorbachev proposed a Sino-Soviet summit meeting, which was finally scheduled for June 1989. He withdrew the troops unilaterally from the Chinese borders. In April 1988, Gorbachev signed accords calling for the total withdrawal of Soviet military forces from Afghanistan by February 1989.

In 1989 Moscow made its first attempt to establish contacts with Association of South East Asian Nations (ASEAN) and thereby scheduled a series of high level meetings with the representatives of member countries chiefly for the organizations project of a nuclear and arms free zone. This move was criticized by India.

Devendra, Kaushik. (1992: 435–446). *USSR and India's Foreign Policy*, Deep and Deep, New Delhi. Admitted that both the countries faced problems during the late 1980's. Soviet Union was on the verge of losing east European countries. At the same time Rajiv also feared to lose its position as a prime minister of India. Therefore the last conversation (July 1989) between the two leaders showed cracks in Indo-Soviet partnership.

In July 1989, the Soviet policy to intervene to prop up communism (the Brezhnev doctrine) was replaced by what one Gorbachev adviser described as the "Sinatra Doctrine". As per the doctrine East European countries were now able to go their own way - politically and economically - without fear of invasion by Soviet troops. Mr V.P Singh, the successor of Rajiv Gandhi, visited Soviet Union in July 1990 in order to seek reassurance for continued support of Soviet Union. Though Gorbachev tried to offer but was not in a position to deliver. He promised to renew the friendship treaty of 1971 which was due to renewal in August 1991.

Peter J. S. (1993: 41), in his research paper, the Soviet Union model: Continuity in a changing environment, British Academic Press, London. Analyzed that Soviet delegate voted in the UN resolution favoring the nuclear free zone that India continued to oppose thus indicating how much the indo-soviet partnership had eroded. In October 1990, Mikhail Gorbachev was awarded the Nobel Peace Prize. Fourteen months later, he resigned as Soviet leader and later the Soviet Union disintegrated. It was from here that the dimensions of Indo-Soviet relations underwent changes.

CHAPTER 4

Indo-Russian Defence Cooperation In Changing World Scenario.

4.1 Introduction:

This chapter describes the bilateral defence cooperation between India and Russia in the transition phase and its impact on defence relations between the two times tested friends. Soviet Union/Russia had enjoyed a monopoly in the India's arms market and India remained a major buyer of Soviet/Russia arms till 1990. The defence cooperation declined after the end of the cold war and subsequently the collapse of the Soviet Union. India looked for other arms suppliers and Moscow tilted towards West. The subsequent sections of the chapter explains restoration of relations especially in the defence sector that included military to military exercises and Russia's support to India in nuclear cooperation, is discussed in detail.

4.2 India and Russia in the transition period: A Paradigm Shift.

Michail Gorbachev's formulation of foreign policy and the priorities that he made resulted in factual view of evolving Indo-Russian bilateral ties. The concept of 'common European home' and the 'pro-Western' tilt was evident in Gorbachev's decision to various issues like the onsite inspection of the arms facilities made under the conference on security and cooperation in Europe (1986), scraping of ballistic missiles of intermediate range (Intermediate Range Nuclear Forces, 1987), reduction in number of conventional forces made under the treaty of conventional forces of Europe (CFE) in 1990, withdrawal of the Soviet forces from Afghanistan, its assent in 1990 to the reunification of Germany and in early years of 1990's Soviet support to the United Nation's sanctions against Iraq, a traditional ally of Moscow.

In the transition phase two schools of thought emerged (J. Bakshi. 2001: 2-3). The first school support the upcoming relations with India (The pro-Indian lobby within

Russia), composed of members of the Russian parliament (Duma), academics and the defence industry. From their point of view India was strategically and economically significant. They believed to establish special relations with India to offset the United States hegemony in the South Asian region and India as in the top most list of arms importer after China could be important for the survival of defence industry in a free market economy.

The second school of thought was led by Foreign Minister Andrei Kozyrov. This group wanted to strengthen Pakistan to counter the radical fundamentalism as a possible threat to the Southern periphery of Eurasian Empire. Kozyrov gave more priority to Pakistan on the basis more geographic proximity with Russia than India. This can be seen in the following political map 4.1.



Source: <http://maps.google.co.in/maps?hl=en&tab=wl>.

Unfortunately, the anti Indian school resulted in a drastic change of foreign policy towards India. The National interests and economic considerations became the

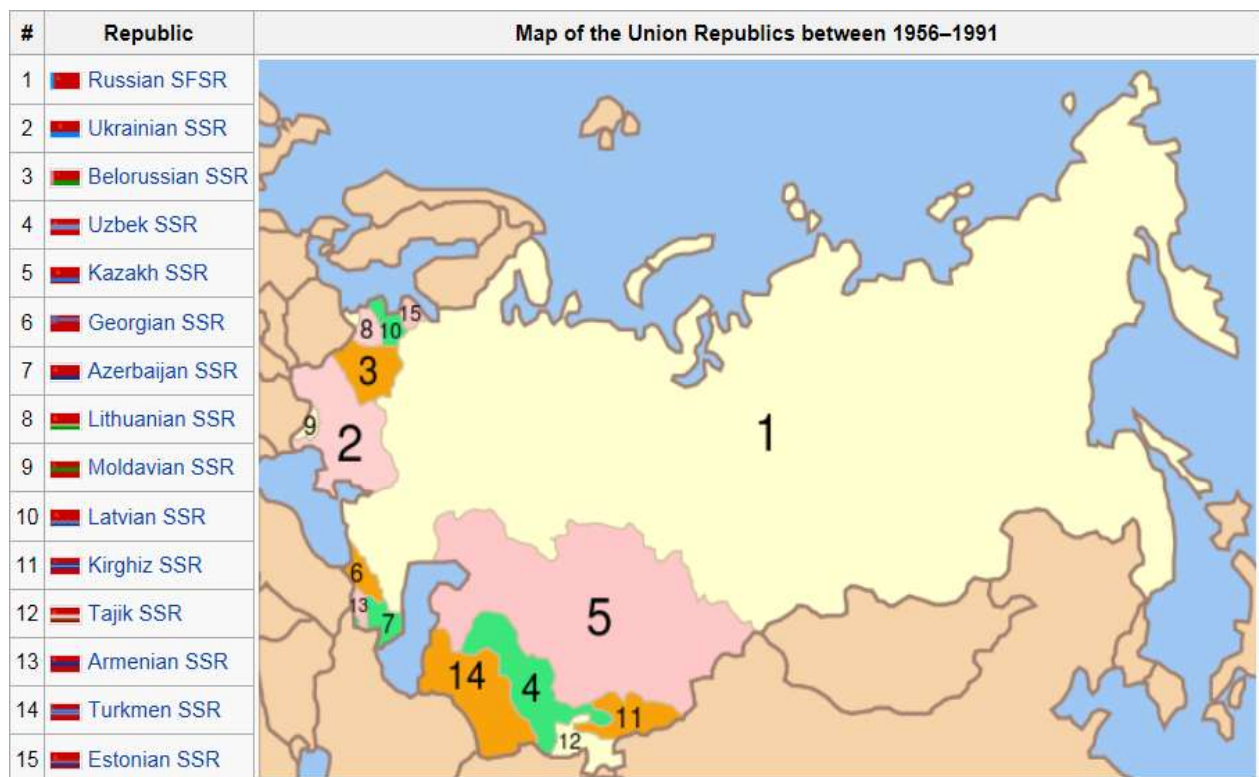
primary considerations of Soviet global policies. The leadership focused on the de-ideologization of its foreign policy. As the end of the cold war brought about a change in the foreign policies of most of nations throughout the globe, Russia too witnessed a change in the foreign policy. United States soon emerged as a foremost giver of economic donations to Russia. (B. M., Jain. 2003: 6). De-ideologization has also affected Russia's relations with India.

More importantly, the de-ideologisation process of the Gorbachev's period (Inder, Singh. 1995: 70) led to an end to the era of ideological confrontation, which had been the main concern of world politics in general and Soviet-United States relations in particular since the post world war era. This de-ideologization policy was viewed by Jyotsna Bakshi, in his article (1990), India in Russia's Strategic Thinking, as "*the main thing was that Moscow wanted its policy towards India to be pragmatic and flexible*". Gorbachev's last presidential address to the nation on 25 December 1991 to defend his ground as:

"I have firmly stood for independence and self determination – for the sovereignty of the republics – but at the same time for the preservation of the (Soviet) state and the unity of country.....The policy that has prevailed is one of the dismembering this country and breaking up of the state – and I cannot agree with it" (M. Reiss. 1995: 463).

Finally, Michel Gorbachev's resignation on 25 December 1991 signaled the downfall of the Soviet Union and the end of the hostility (Cold War) in the bipolar world order. The upper chamber of the USSR Supreme Soviet proclaimed on 26 December that the Soviet Union no longer existed. The new Russian President Boris Yeltsin which had officially replaced the USSR had emerged as one of the most powerful leader of the Commonwealth of Independent States (CIS).

The following map 4.2 shows collapse of Soviet Union and the emergence of fifteen independent republics.



Source: <http://en.wikipedia.org/wiki/Soviet-Union>.

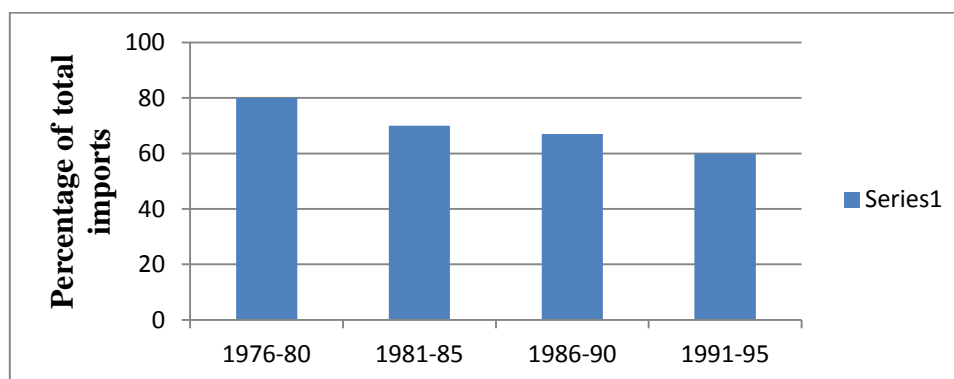
This was a period that saw a vastly altered geopolitical scenario, collapse of one of the poles in the bipolar configuration of world forces, emergence of other centre's of power (Japan, European Union and China) and the end of the strategic expansion policy (Warsaw pact) of the Eastern bloc.

Russian President Boris Yeltsin in his early years made drastic changes such as the hard bargaining, accompanied at times by backing out from commitments, the inter-linkage of outstanding issues and placing conditional- ties all of which were practices usually employed in conventional diplomacy that had characterized the course of the Indo-Russian defence cooperation.

The earlier decision to sell the military equipments had exclusively made by the politburo of Soviet Union. On the other hand, in the transition phase the choice of where and when to sell Russian arms was vested with the power of the Russian Military industrial Complex (MIC), on economic basis than by ideology. According to Vitaly Kataev (1992), Director General of Russia's Military Industrial Complex opined that *"Economics dictate the routes of trade"* (Kataev. 1999: 99).

Yeltsin shorn the Central Asian identity of the former Soviet Union, cut back further on its global commitments and moved towards becoming more and more Eurocentric and Atlanticistic¹ in his early phase. The issue of arms sales was an important area where Russia strongly pursued its foreign policy agenda against the opposition from the west declined due to the reduction in arms sales. Soviet Russia's share of the global arms market dropped from thirty-two percent in 1989 to eight percent in 1994 (D. Ollapally. 1998: 516). Consequently, the percentage of Indian arms imports from Soviet Russia declined.

The following figure 4.3 shows India's reduction of arms from 1976 to 1995.



Source: Armaments, Disarmament and International Security: SIPRI Yearbook 1996 (New York: Oxford University Press, 1996), 482.

¹ Sergei Stankevich, coined the term Atlanticists, Russian State Counsellor, the foreign polic orientations was established on the premise that Russia's identity should be defined as a civil state within the boundaries of the Russian federation, which was in tune with the goals of liberal democracy, market reforms and the preferred inclination towards the west.

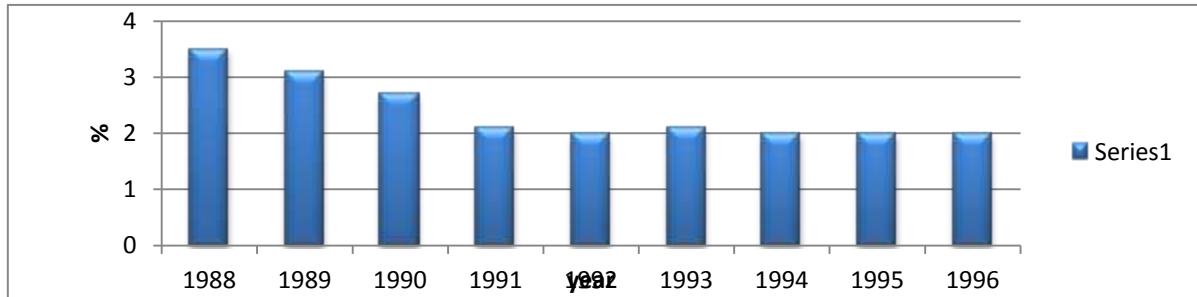
An uncertainty factor prevailed in domestic and economic transition in Russian Federation led to bottlenecks in production, supply and marketing of defence products. Manufacturing units of arsenals were not centrally located in Russia but were scattered in other newly independent states of USSR such as IL-76 transport jets are produced in Uzbekistan and some parts of AN-32 transport aircrafts (made only for export to India) are produced in Russia and Belarus but are finally assembled in Ukraine (S. Ranendra. 2011: 19).

This resulted in the decline in the costs of Russia in terms of hard currency earnings and job security for millions employed in this sector. The continued decline also threatened Russia's technologically and skill base in the arms manufacturing sector which was of great strategic importance to Russian Federation.

The defence companies of Russian Federation lost nearly about eighty percent of their funding from the Russian government. It resulted in the loss of traditional markets. Russian defence expenditure dropped to levels that were a fraction of the Soviet era, and was manifestly insufficient to support many of the existing defence firms of its vast Military Industrial Complex (MIC) that comprise 2000 enterprises, 900 research organizations and design centre's with a combined workforce of around five million. Boost in the arms export was seen as crucial to the survival of the vast MIC in the absence or paucity of domestic defence orders.

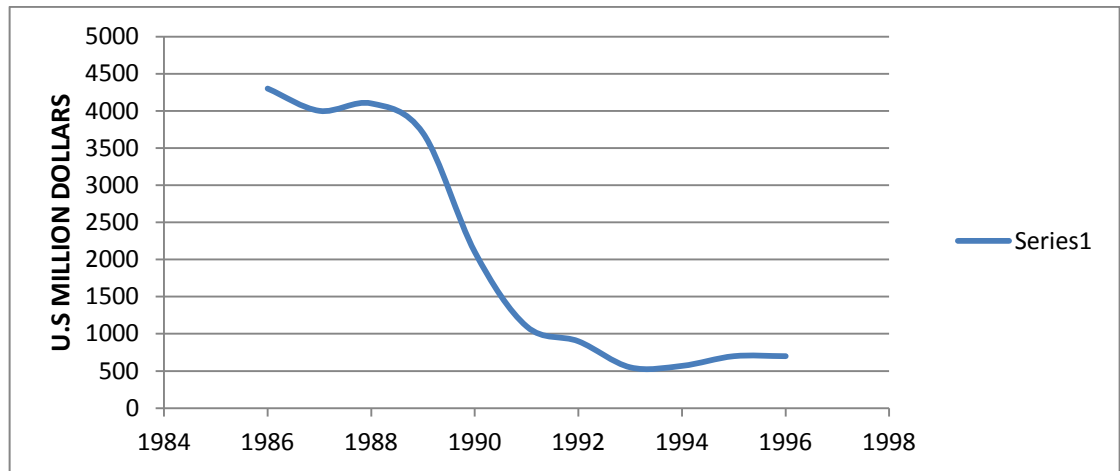
India was apprehensive that Russia's economic reliance on the West would affect its reliability as a military supplier. Majority of the military technology of India was of Soviet Russian origin. India was in a position in which 70 percent of army armaments, 80 percent of air force and 85 percent of navel arms were soviet produced were in the Indian stock (Y. Golotyuk. 1996: 2). Under such circumstances India was faced with an immediate crisis, apart from lacking of indigenous capability to manufacture the required arms and spares. The postponement of the developing indigenous defence industry was because of the over reliance on Soviet made military hardware. In addition to India's

economic crisis in 1990-91 and the stagnation and subsequent decline of primary arms supplier lead to the reduction in defence expenditure and military technology of India. The figures 4.4 and 4.5 given below shows the military expenditure from 1988 to 1996. Indian Military Expenditures as a Percentage of GNP, 1988-96.



Source: Armaments, Disarmament and International Security, SIPRI Yearbook 1998 (New York: Oxford University Press, 1998), 230.

Indian Arms Imports in Constant 1996 U.S dollars.



Source: Data obtained from, World Military Expenditures and Arms Transfers, 1997 (Washington, Arms Control and Disarmament Agency, 1998),

Therefore, the inability of Russia to continue the earlier flow of military hardware coupled with the sharp reduction in Indian military expenditures that weakened the primary bond that had earlier united India and former Soviet Union.

The main concern of India during this phase was the requirement of spare parts for the bulk of Soviet origin military equipments in Indian stock. Several delegations were deputed to secure defence factories of Original Equipments Manufacturers (OEM) scattered all over Soviet Union literary with full of money in search of spare parts that were hard to come by.

The paucity of primary sources of spare parts and equipments had a deep impact on the Indian security planers. Consequently, India felt the need to look for alternative sources and this affected the market share of Russian defence industry in India's arms market. India's then defence minister Sharad Pawar's visit to Moscow in September 1992 to meet his counterpart Pavel Grachev to chalk out the plan for restoring the bilateral defence ties proved futile. Additionally, the minister also visited to other supplier (Ukraine) in October 1992 for defence equipments. He made agreements for the supply of spare parts for AN 32 aircrafts and other military arsenals, in return for medicines and textiles and a partial payment in hard currency (P. Stobdan. 2010: 128).

In addition, the normalization of Indo-Israeli ties in 1992 became a step for diversification of arms resources. Israeli defence industry and European defence companies found India a big arms market, lost by Russian Federation. Therefore Israel was seen, a better option, as a future supplier of the spare parts and military technology known then.

Under such circumstances India logically did not buy any defence equipments nor were there major arms transfers during this because it wanted to upgrade its existing military arsenals. In this phase India and Russia were found itself entangled in a web of controversies and such as the rupee versus ruble debate. India had a total debt of 12-16 billion Dollars owed to the Soviet Union for arms purchases. While India was willing to pay off its debt, a disagreement emerged between the two nations over the nature and the exchange rate of the currency that would be used.

The Soviet Union had been willing to accept rupee-for-arms arrangements since the initial Soviet intent in the military cooperation was to use India as a strategic counter balance in the South Asian Region. Since there was not a huge demand for Indian imports in the Soviet Union, almost half of the rupee based debt remained in Indian banks found to be uncollected. Subsequently, the vast Indian debt became an issue of apprehension. Trade between Russia and India almost collapsed because of conflict over the Rupee-Ruble exchange rate and the amount India owed to Russia. Finally, a resolution reached in January 1993 that called for India to repay Russia one billion Dollar per year in Indian goods until 2005, after which the remaining thirty-seven percent of the debt would be repaid without interest over forty five years (A. S., Anita. 1995: 70). The Rupee-Ruble exchange controversy and the cancellation of the Glavkosmos deal for cryogenic engines by Boris Yeltsin under US pressure also created doubts about the reliability of Russia as a potential arms supplier.

Though Russia's eagerness to built close relations with the West and Yeltsin's visit to a number of nations in the vain hope of receiving economic aid to bail out Russia His expectations were soon frustrated when the West reneged on fulfilling aid pledge, citing Russia's failure to fulfill certain conditions. (B.M., Jain. 2003: 6). Therefore it is one of the reasons that Yeltsin refused to agree on the question of NATO's expansion in the reorganization of E.U. and Russia's role in Baltic and Balkan regions. Gradually, Yeltsin's attraction with the West diminished as he realized that the United States and its Anglo-Saxon allies were not reliable partners. According to Stephen Foye,

The 1993 marked the end of an initial period of confusion in Russian foreign policy. Key politicians established a consensus that resulted in a comprehensive foreign policy agenda that rejected idealism in Western relations and aimed instead at vigorously promoting Russia's national interests (Stephen, Foye. 1995: 7).

4.3 Restoring the Indo-Russian military relationship:

Russia was aware that India was potentially one of its best customers, and was anxious to retain its Indian arms market. The two countries tried their best to restore their relations in the changing world order. In March 1992 Moscow offered India nuclear powered submarines, MiG-31 aircraft and SU-28 fighter bombers to counter the sale of French Mirages and US F-16s to Pakistan. During this period it was therefore, natural that if Russia stopped its arms supplies to India Western countries especially United States would try its best to capture the big Indian arms market for its economic and strategic purposes. The discussions on joint Indo-US naval exercises were considered as a threat to Russia's geopolitical interests in South Asia region (Ramesh, Thakur. 1993: 846).

The visit of Russian president Yeltsin to New Delhi in 1993 after becoming the first Russian President was in favour of a more realistic and less ideological relationship, to cement Indo-Russian ties. The importance of his visit was the signing of 'Friendship and cooperation Treaty' with the Indian Prime Minister Mr. P V Narasimha Rao which was to be valid for twenty years (Jain. 2003: 7). This treaty was similar to the 1971 treaty Indo-Soviet treaty of peace, friendship and cooperation that was signed between Indira Gandhi and Leonid Brezhnev. However, the new treaty did not include clauses containing mutual assurance on security matters which was the basis of the Indo-Soviet Treaty of Peace for 20 years. Unlike the Indo-Soviet Treaty, the word peace was not retained in the new treaty. Another agreement on the military technical cooperation was also signed for a period of ten years during his visit.

Russia expressed willingness to clear the backlog of supply of military spares and equipment and offer seven-year credits at five percent interest. Russia intended to grant eight hundred thirty million dollars worth of credit to India to finance programmes for the construction of aircraft, ships and tanks under agreements signed between India and the FSU (Ramesh, Thakur. 1993: 842).

The Russian Secretary of State, Gennadii Burbuli on 8 September 1992 acknowledged that Russia had inherited considerable obligations towards India in the areas of defence, deliveries of spare parts and armaments. He assured Pawar that India (Ramesh, T. 1993: 843) remained a priority for Russia.

The CIS Commander-in-Chief Marshal Evgenii Shaposhnikov, held meetings on Indo-Russian military co-operation with the Indian ambassador, Ronen Sen, on 29 October, and then with Air Marshal Suri on 31 October. On his return to India, Air Marshal Suri stated that Russia would shortly be resuming deliveries of spare parts and equipment for the IAF's MIG fighters. During Pawar's visit to Moscow in December 1992, India finalized an agreement for the purchase of twenty MIG-29M (combat) and six MIG-29UM (training) Fulcrum multirole fighters, as well as a related spares and support package, the total deal being worth four hundred sixty million Dollars (R. Harshe. 1998: 5).

Yeltsin stated, during his visit to India in 1993 that Russia would sell armaments as other countries in the world wished to sell. Supplies of Russian military equipments and spares to India were resolved. Sharda Pawar and his Russian counterpart Grachev signed new agreement on military cooperation in 1993. It envisaged cooperation in defence, science & technology, training visits and exchange of personnel. Another milestone was achieved when Moscow offered to help in the construction of manufacturing military spare plants in India, would greatly relieve pressure on the Indian armed forces (P. Stobdan. 2010: 129).

Grachev Pawar agreements foreshadowed joint research and development projects. During the visit, Russia reportedly offered to sell its latest jet aircraft, the S-54. Still in the prototype stage, the S-54 incorporates state of the art technology in avionics and weapons systems.

Mr. P.V. Narasimha's visit to Moscow from 29 June to 2 July 1994, the talks were held in an atmosphere of traditional friendship and trust and the agreements signed subsequently gave a strong impetus and momentum to the development of

bilateral relations. Both sides noted their broad identity of views on regional and global issues and reaffirmed their determination to continue their close cooperation. Rao's visit was described by Russian Deputy Premier Yuri Yarov as one where 'India and Russia have completed the stage of learning as to how to work in new conditions.

An important step that was taken during this visit was the signing of 'Moscow declaration' to protect the cultural and religious diversities of their societies (Unity in Diversity) from religious extremism and entitled both countries to protect the interests of pluralist societies. Article 6 of the Declaration stated that:

"India and Russia, being among the largest multiethnic, multilingual and multi-religious States, recognize their responsibility for opposing the threats to democracy and peace together with other members of the world community. They believe that the experience accumulated by them in governing their societies on the basis of their commitment to unity in diversity can make a valuable contribution in this respect. They are convinced that the guiding principles of every democratic society, such as equality, rule of law, observance of human rights, freedom of choice and tolerance should be equally applicable to international relations. These must be based on respect for sovereignty, equality and territorial integrity of States, non-interference in their internal affairs and peaceful coexistence" (H. Pant. 2009: 47).

In accordance with the above agreement both the nations stood by each other on sensitive and crucial issues i.e. Kashmir and Chechnya Russia categorically supported India's stand on Kashmir, and rejected a plebiscite². India on firmly its part supported Russia to crush the radical elements in Chechnya, as steps to maintain peace and cooperation. Both side's laser and laser technology expressed their desire to develop scientific design and technological cooperation, in high technology areas as utilization of nuclear energy for peaceful purposes and joint ventures.

²"Pakistani officials are understandably disappointed at Russia's attitude", Pakistan Times, January 31, 1993.

On a diplomatic front, the two partners affirmed that the successful development of multi-religious, multi-ethnic states promotes international peace and stability. They urge other members of international community and international and regional organizations to respect the integrity of these states.

Defence agreements were consecutively signed during Rao's visit to Moscow that augured the stabilization of Indo-Russian military ties. Russia moved a step ahead to upgrade its I70 MiG aircraft to keep them combat-worthy well into the next century (Ramesh, T. 1993: 848) Indian and Russia agreed that the firms of both the countries, decided to set up a joint venture company (Indo-Russian Aviation Private limited) in India that will manufacture spares parts and service military aircraft of Russian origin. Hindustan Aeronautics Limited (HAL) in collaboration with Russian companies fulfills the defence requirements of the Indian air forces such as Engines, Accessories & Spares of all kinds of aviation equipments (Kundan, Das. 2008: 80).

In this way India became among those countries that offered maintenance facilities for Russian aircrafts and the lonely country in the world during this period with which Russia signed, in 1994, long-term military–technical cooperation programme till the year 2000 worth Seven to eight billion dollars. Meanwhile, Yuri Yarov's, Deputy Prime Minister of Moscow visited India in the summer of 1994 in which tactics to set up engine repair plants for MiG 29 and to upgrade T-72 tanks was also finalized in his visit. The Russian leadership (Prime Minister Victor Chernomyrdin) visited India in December 1994. It proved significant both for the conclusion of agreements relating to cooperation in space research, merchant shipping, etc. More importantly Russian premier stated that Moscow was not supplying arms to Pakistan, and criticized Islamabad for providing support to Muslim rebels in (Chechnya) Moscow's territory. It was also decided to sign a long-term military and technical cooperation contract up to the year 2000 (P. Stobdan. 2010: 129-130). Oleg Sidorenko (30 March 1996), the Deputy Director of the Rosvooruzhenie, assured India that there would be no interruption in the supply of spare parts.

With the passage of time Russia's market driven approach directed it to an increase in the sale of arms in the global market. Yevgenia Borisova (1999) in his article, '*St. Pete Shipyard Turns to State for Loan Bailout*', opined that India buys more hardware from the Russian military industry than its own military forces. RIR reports also revealed that about eight hundred military manufacturing units of Russia were kept in operation by Indian defense contracts.

India took initiatives to build new bridges with the Duma and utilize earlier Soviet lobbies. India was able to exploit lobbies against Andrei Kozyrev's inclination towards West Yevgeny Primakov replaced the pro-West Kozyrev as Russia's Foreign Minister (Primakov was later elevated as Prime Minister). He stated that the pro-western policy was a 'mistake' (Kundan, D. 2010: 154) as formulated by his predecessor.

To cement the bilateral ties he floated the idea of strategic triangle comprising of Russia, India and China as a policy to counter the hegemonic power of United States in Asia. Although Russia India China unity remains doubtful for some Indian commentators like Abanti Bhattacharya the development of a strategic triangle would be idealistic. The reasons can be easily found in the mutual distrust between India and China on the border issue (Bhattacharya, A. 2004: 2). Similarity of views of both the countries with regard to the multi-polar world order. A Middle East expert and former Director of the Institute of Oriental Studies, (Primakov) stated that Russia placed India fourth in the pecking order, after the US, Europe and China, in the list of countries with which Russia was developing relations.

Russian defence minister Igor Rodionov and his Indian counterpart M S Yadav signed an agreement in 19 October 1996 for military exercises for the promotion of friendly relations later was held in Periodic exchange of information on military matters including operational doctrines of military equipment was the result of Igor Rodionov visit.

Mr. Yadav stated that large number of important defence related projects were implemented. His return visit to Russia in the 1997, extended the existed defence agreements for a period of ten years, and in the course of Prime Minister Primakov's visit to India in December 1998, the two countries formally signed the long-term military technical cooperation agreement till the year 2010, worth 10.15 billion Dollars.

Cooperative venture between the two countries was initiated in 1998 with an agreement to jointly develop the BrahMos cruise missile. This missile can be launched from air, land or sea platforms, has stealth capabilities, and is probably the fastest cruise missile in service anywhere in the world (R. Thorntorn. 2012: 8). It is an example of what the two can achieve when they do cooperate. The BrahMos became operational in the Indian military in 2006. A new variant, the BrahMos II, should be ready by 2014 (Rod, Thornton, 2012: 105).

India during this period imported number of conventional weapons including tanks and aircrafts. Following is a list of major weapons that India received and money paid to Russia.

Table 4.1 Main Indo-Russian Military Contracts:

Contract	Value	Status
1990: 10 diesel electric submarines type 877EKM	Not made known	Fulfilled
1996: 50 Su-30MK and Su-30MKI aircraft, 140 aircraft licensed production	\$3.0 billion	Being fulfilled
1997: 3 frigates type 11356	\$1.0 billion	Fulfilled
2000: 124 tanks T-90S, 176 tanks licensed production	\$0.8 billion	Fulfilled
2002: guided munition "Krasnopol", 2000 pieces	\$80 million	Fulfilled

Sale of the aircraft carrier Admiral Gorshkov, and a packet of 20 contracts for modernising and arming the vessel and its aviation group	\$2-3 billion	Agreed
Three diesel electric submarines type Amur 1650	Not made known	Draft leasing
The sale of 1-2 atomic submarines	Not made known	Project
Supplies of precision tactical rocket Iskander-E	Not made known	Project

Source: Viktor Myasnikov, "Indostan: "Sukhoy" goes into a spin", Nezavisimaya Gazeta, 16 December 2003.

3.4 India's nuclear test, Pokhran-II (1998) and Russia's Response:

National Democratic Alliance (NDA), made efforts to develop India as a nuclear state and carried out nuclear test (bomb) of May 1998. Defense Minister George Fernandes hailed it as the advent of nuclear realism³ of India's threat perception. In response to India's nuclear tests in 1998, Russia had joined the chorus of denunciation by the west, though in more muted way.

Although Moscow wants India to sign the CTBT and NPT to halt nuclear proliferation in South Asia, there is an element of pragmatism in its nuclear policy towards India. This is the as to why Russia neither strongly condemned India's nuclear weapons tests in May 1998 nor imposed sanctions against it, as the United States and Japan did. On the contrary, Moscow fully shares New Delhi's stance that it would first need to build a national consensus before signing the CTBT. If seen in this context, it is quite significant that Putin refused to withdraw nuclear assistance to India even in the

³ Bohlen. C. (26 August 2001). Putin the Power Broker, New York Times.

face of mounting American pressure. He reassured India that Russia would not withdraw its promise of assisting India in developing its nuclear energy sector⁴.

In June 1998 Russia's Atomic Energy Minister, Yevgeny Adamov, visited India to sign a supplement to the agreement of 1988 on the construction of two light water nuclear reactors (LWR) of one thousand MG at Kudankulam in the southern state of Tamil Nadu. The accord is a supplementary to ten year old agreement between India and the former Soviet Union to build a nuclear power plant in India under full International Atomic Energy Agency (IAEA) safeguards (Foshko, Katherine. 2011: 46). Russian leadership stated that despite differences on the nuclear issue it would maintain relations especially in defence as usual with India

He also made it clear that India's nuclear strategic programme was purely indigenous and that there was no question of Russian military nuclear technology being transferred to India. The leaders of some opposition parties in Moscow took a pro-India stand. General Secretary of the Communist Party of the Russian Federation, Gennady Zyuganov was the main leader who welcomed the Indian nuclear tests. Gennady Seleznev, Speaker of the State Duma and a prominent communist, lauded India's determination in continuing its nuclear weapon programme despite US pressure. (Achin, Vanaik. 1998: 55)

A headline in Izvestiya (Newspaper of Russian Ministry of Defence), read that Moscow will not wrangle with its old ally India, Indian nuclear tests do not intimidate Russia. It was clear that Russia's main worry was the threat of other threshold countries such as Pakistan that also made nuclear weapons. Russia urged Pakistan to show maximum restraint and adhere to all non-proliferation norms.

After US-led missile strikes on Iraq in December 1998, which sidelined the UN Security Council of which Russia is a permanent member, the Chairman of the Federation Council, Yegor Stroyev, declared that Russia was not opposed to India going

⁴. Mohan, C. Raju. (October 3, 2000). "India, Russia to discuss n-issues," The Hindu: New Delhi and Radyuhin, Vladimir. (October 10, 2000). "Secrecy on defence, nuclear deals," The Hindu: New Delhi.

nuclear' since India as a great power has the right to possess nuclear weapons for self-defence⁵ As a result Moscow was seen as a reliable friend and vital source of sophisticated military hardware of India.

Despite, U.S. pressure to stop military cooperation with India (which was part of U.S. President Bill Clinton's talks with Russian President Boris Yeltsin in September 1998), the two countries extended the long-term agreement on military technical co-operation up to the year 2010 in December 1998. This agreement envisaged shifting the emphasis from buyer-seller relationship to the joint ventures and transfer of new military technologies between the two partners. Therefore, Moscow came out as an independent source in arms supplies and a preferred partner of India⁶.

An official newspaper from ministry of defence, Russia, '*Krasnaya Zvezda*' (September 1999), read that although Moscow faced increased international competition Russia tried its best to maintain New Delhi as a major buyer of military technology. Defence exports are considered crucial for the very maintenance and development of Russia's vast military industrial complex (MIC) as the orders from its own Ministry of Defence have declined because of shortage of funds.

India's nuclear weapons test was followed by Pakistan, both the rivals possess the over- killing capacity. Moscow opposed Pakistan's nuclear test at all levels and assured India that Russia will not sell arms to Pakistan. Soon afterwards, conventional arms sales to India increased, included advanced T-90 tanks, an aircraft carrier, and licensed production of SU-30 combat aircraft. Russia had stripped their own Army was generous enough to spare its supplies to meet India's demands in the Kargil conflict between India and Pakistan in 1999. In turn these sales enhanced the productive capacity of Russian military industrial complexes (Deepa, Ollapally. 2010: 10).

⁵Yegor, S. (February 7, 1999). Defends India's nuclear tests', Hindustan Times,

⁶"Old friends in Changing Time", The Hindu, New Delhi, December 2, 2002.

4.5 Defence cooperation during the first term of Putin (2000-2004):

In order to increase the arms sales Putin formed fifty integrated defence companies. He took measures to restructure the MIC to enhance the production and arms sales in the global arms market. Reformation of significant part of military industrial complex proved satisfactory. As a result Russia ranked second after US in the conventional weapons exports to the world recipients.

Russia's tilt towards west did not interfere in the policy of containing strategic relations with India. The strategic partnership from 2000 onwards witnessed assertion of mutual friendship. Putin made an official visit to New Delhi in 2000. His name (PUTIN) was also described as an acronym for planes, uranium, tanks, infrastructure and nuclear power. (P. K., Budhwar. 2007: 70). It set the tune for a new beginning in the relationship- the one that witnessed the signing of eleven agreements apart from establishing architecture of annual summits, (David, Scott. 2011: 214), common stand on West Asia, Central Asia, Iran, Iraq etc and common understanding in the emergence of multi-polar world order were noteworthy. The declaration on strategic partnership bound the two nations to refraining in any military, political or other alliances or armed conflict directed against the other side. Thus, defence, legal, scientific, political, cultural and technological cooperation was made the basis of this agreement. It was upgraded to 'special and privileged partnership' in 2010. The first agreement covered from 2001 to 2010 while the second one, signed during Prime Minister Manmohan Singh's visit to Russia in December 2009, should covers from 2011 to 2020⁷.

Military cooperation during this period reached at the level of exporting India Licensed production of 140 Su-30s, was finalized in December 2000 in a deal worth over three billion U.S. Dollars including the transfer of the advanced 'AL-31fp' thrust-vectoring engines⁸. Indian aerospace scientists are closely collaborating in the development of the avionics of the Su-30s. As the nuclear test of India delayed the

⁷ 'India, Russia Closer \$25Bn Deal for Fighters', Defence World, 10 October 2010, <http://www.defenceworld.net/go/defencenews>. Accessed on 29 June 2012.

⁸ Radyuhin, Vladimir. (December 28, 2001). India, Russia Sign SU-30 Deal. The Hindu, New Delhi.

Indo-US collaboration on the Light Combat Aircraft. Moscow's MIG-MAPO found an opportunity in the improvement of the avionics of India included the on-board 'mission computers' for this fly-by-wire aircraft whose technology-demonstrator (LCA-TD1) conducted its first successful flight in March 2001⁹.

The purchase of three hundred ten T-90 battle tanks worth six hundred million dollars was signed between George Fernandez (India's defence minister) and LlyaKhlebano (Dupty prime minister of Russia) in February 2001. The first meeting of the Indo-Russian commission for military-technical cooperation took place in Moscow in June 2001. The two sides signed a military cooperation protocol up to 2010. In February 2002 India and Russia signed four defence protocols in New Delhi. One of the protocols included an agreement on cooperation between the armed forces of the two states.

India had received one 124 tanks assembled at Uralvagonzavod in the Russian city of Nizhny Tagil and the rest 186 was assembled in India at the heavy vehicle factory in Avadi in Tamil Nadu. To handle the Russian arms technology 40 Indian experts were trained in Nizhny Tagil in the art of assembling the tanks machinery. In addition, two other agreements such as the technology transfer and manufacture of main battle tanks in India including production of weapon systems of these equipments was agreed and signed. The missiles of the tanks were procured in knocked-down condition and were assembled by Bharat Dynamics in New Delhi (P. L., Dash. 2003:194).

India imported multi-functional Sukhoi-30MLI fighter aircraft on 27 September 2002 for their induction a ceremony was celebrated at Iohagaon (An air base near Pune). The aircraft consisted of air to air missiles, air to surface missiles and array radar system. Six IL-78 tanker aircrafts including Sukhoi modified one hundred forty fighters that India received from Russia worth 3.3 billion Dollars in 2003. Talwar and

⁹ Wollen, M.S.D.(2001).The Light Combat Aircraft Story.Bharat Rakshak Monitor, 3:5.<www.bharat=rakshak.com/monitor>.Accessed on 23 October 2012.

Tabar frigates, Sindhuvir and Sindhughos submarines currently operational in Indian Navel were produced by Russia. Kurganmashzavod (producer of infantry combat vehicles) offered caterpillar cross-country vehicles and tractors to India (P. L., Dash. 2003:195).

4.6 Joint Military Exercises: A step towards augmenting defence and strategic partnership:

In-spite of close defence cooperation between India and Russia, Indo-US defence and military-to-military cooperation has greatly expanded. Washington renewed military contacts with New Delhi following the September 11 attacks. India joined President George W Bush's campaign against international terrorism. In late September 2001, President Bush lifted sanctions imposed under the terms of the 1994 Nuclear Proliferation Prevention Act following India's nuclear tests in May 1998.

The non-proliferation dialogue bridged many of the gaps between the two countries. So far eight naval exercises were held, the recent one was held in 2012. The exercise took place in approximately 450 nautical miles of sea and air space, and offered the opportunity for the U.S. and Indian naval services to conduct communications exercises, surface action group (SAG) operations, helicopter cross-deck evolutions, and gunnery exercises.

Russia had also shown greater interest and upgraded military-to-military ties. In October 2005, the two armies and navies held joint exercises in the deserts of Rajasthan and in the coast of Vishakhapatnam respectively. Five warships from the Russian pacific fleet, including a missile cruiser and two amphibious assault ships, took part in India in the Joint naval exercises. Some Indian military and naval personnel underwent a two month course in Russian to transcend the language barriers.

Earlier a joint navel exercise was held in 2003. Both nations made efforts to make the joint exercise a regular event on the lines of similar exercises with the western

countries. The previous joint naval exercises took place in April 2007 in the Sea of Japan and joint airborne exercises were held in September 2007 in Russia. The last joint military exercise between Russian and Indian army units were held in Uttarakhand (India) in October 2010.

Military-to-Military ties between the two nations suffered a setback in 2011, as Russia cancelled both Indra series of military exercises with India. In April 2011, a flotilla of five warships from the Indian navy's eastern fleet went for joint naval exercises at Vladivostok in the Russian far-east were turned back without any manoeuvres. The joint army exercises that was scheduled to be held in Russia in June, 2011 was also cancelled shortly afterwards. One of the reasons cited was that New Delhi had not informed Moscow of the army exercises in advance.

The Main aim of these joint exercises was to counter the terrorism threat of which the both countries are victims. Exercises focused more on tactical part rather than on using more weapons. These exercises improved bilateral defence relationship and promoted mutual operational compatibility.

4.7 Russia's major arms exports to India:

Major weapons that India procured from Russia such as Su-30MKI multi-role fighter aircraft, Il-78 tanker aircraft to be used as platform for Airborne Warning and Control System (AWACS), Mi-17-IV military transport helicopters, R-77 air-to-air missiles, Kilo class/type 877E submarines, frigates, Ka-31 Helix airborne early warning helicopters, MiG-29K, including MiG-29KUB version for use on aircraft carrier Admiral Gorchakov, Ka-27PL (Ka-28 version) and Ka-31 helicopters; T-90 tanks, fire control radar, air and sea surveillance radar, combat radar, aircraft radar, anti-tank and anti-ship missiles, etc. (SIPRI. 2005: 417-418).

The IL-76 heavy transport aircraft fleet forms the backbone of the heavy lift fleet. The fleet gave the IAF a previously nonexistent true strategic airlift capability. To this has been added the force multiplier and much sought after IL-78 flight refueling

aircraft which was under discussion since 1984. Their induction into the IAF commenced in January 2003 and eventual fleet strength was raised to six. The IAF's purchase from Russia is not restricted to aircrafts (Bharat, Kumar. 2004: 170).

The existing SAM II SAGW systems, we procured SAM III Pechora, OSA AKM along with shoulder-fired Igla missiles. Except for the SAM-II which has been phased out, the others continue to be the mainstay of the IAF's air defence surface-to-air guided weaponry. To augment its detection and direction capability, India also acquired various high powered, medium and low level radar systems from Russia. Over these decades, India has acquired anti-aircraft systems like the Kwadrat, Shilka, OSA-AK, ZU-23 and Tunguska, including T- 54/55/72 main battle tanks and 120/130 mm field artillery (B. Kumar. 2004: 60).

The defence deal worth seven thousand crores, earlier delayed was settled for the purchase of Admiral Gorshkov, an aircraft carrier in 20 January 2004 together with twelve MiG-29K fighters, four MiG-29KUB training jets, as well as six to eight Ka-28 Helix-A and Ka-31 Helix-B helicopters for about 1.5 billion dollars. India's defence minister George Fernandes and its Russian counterpart Sergei Ivanov stated that the deal is a historic landmark in the bilateral defence cooperation (R. Weitz. 2012: 8).

Defence cooperation was one of the major components of Prime Minister Manmohan Singh's visit to Moscow in December 2005. The Intellectual property right was the main issue during this period Russian Defence Minister Sergei Ivanov stated, "We will find it difficult to move forward in high-end defence technologies without an agreement on the protection of intellectual property. We will not hand over technologies for nothing. Russia is not Soviet Union¹⁰."

The two sides agreed to include joint development and manufacture in their defence relation. On 6 December 2005, both countries signed the Intellectual Property Rights agreement that opened the way for joint high-tech projects on a large scale. India

¹⁰ Editorial, "The intellectual Property Rights".The Hindu, December 1, 2004.

preferred Russian supplies, but on condition that they made deliveries within fixed time and reasonable price. The Multi-role Transport Aircraft and the 5th-generation fighter plane have been identified as two such projects (Jyotsna, Bakshi. 2005: 734).

The terms of IPR's agreement mentioned Russia as India's favored arms supplier. Some Indian defence experts have cautioned against such a provision. However, India agreed that it was dependent on Russian arms supplies. (A. Kumar. 2005: 94-95). During this visit, both countries updated their ten year programme on military-technical cooperation and focused towards joint production of new weapons. Some of the joint ventures had been finalised between the two partners (BrahMose) cruise missile is noteworthy example of co-production in defence. Apart from the above mentioned major weapons India imported huge number of conventional arms. Following is a list of weapons and their details that India imported from Russia.

Table 4.2 Transfer of major conventional weapons from Russia to India.

No. ordered	Weapon designation	Weapon description	year of order/ license	Year(s) of deliveries	No. delivered/ produced
3	Fregat/Half Plate	Air/sea surv radar	1983	1997-2001	3
40	P-15M/SS-N-2C Styx	Anti-ship missile	1983	1992-1997	40
3	AK-100 100mm	Naval gun	1986	1997-2001	3
3	Kite Screech	Fire control radar	1986	1997-2001	3
18	MR-90/Front Dome	Fire control radar	1986	1997-2001	18
1	AK-176M 76mm	Naval gun	1990	1998	1
20	K-630 30mm	Naval gun	1990	1998-2005	20
4	40mm RL	Naval MRL	1992	1997-2006	4
4	ross Dome	Air surv radar	1992	1998-2004	4
416	h-35 Uran/SS-N-25	Anti-ship missile	1992	1997-2004	416

7	R-123/Bass Tilt	Fire control radar	1992	1997-2001	7
500	trela-3/SA-14 Gremlin	Portable SAM	1992	1995-1997	350
15	3-65K	AS torpedo	1993	1997-2001	15
225	M38/SA-11 Gadfly	SAM	1993	1997-2001	225
7	Garpun/Plank Shave	Air surv radar	1993	1997-2004	7
27	ET-65E	ASW torpedo	1993	1997-2003	27
78	V-46	Diesel engine (AV)	1994	1996-1997	78
800	9M114/AT-6 Spiral	Anti-tank missile	1995	1998-1999	800
24	2S6M Tunguska	Mobile AD system	1996	1997-1999	24
600	9M311/SA-19 Grison	SAM	1996	1997-1999	(600)
125	Kopyo	Aircraft radar	1996	2001-2006	125
3900	R-73/AA-11 Archer	SRAAM	1996	1997-2006	1650
18	Su-30K/Flanker	FGA aircraft	1996	1997-1999	18
22	Su-30MK/Flanker	FGA aircraft	1996	2002-2003	22
48	53-65K	AS torpedo	1997	1997-2003	48
300	9M311/SA-19 Grison	SAM	1997	2003	300
3	Talwar/Krivak-4	Frigate	1997	2003-2004	3
36	TEST-71	AS/ASW torpedo	1997	1997-2000	36
2	Type-877E/Kilo	Submarine	1997	1997-2000	2
175	3M-54E1 Klub/SS-N-27	Anti-ship missile	1998	2001-2006	133
9	Garpun/Plank Shave	Air surv radar	1998	2000-2006	4
10	Su-30MK/Flanker	FGA aircraft	1998	2004	10
300	9M311/SA-19 Grison	SAM	1999	2006	150

6	Fregat/Top Plate	Air surv radar	1999	2006	2
4	Ka-31/Helix	AEW helicopter	1999	2002-2003	4
6	Kashtan/CADS-N-1	CIWS/SAM system	1999	2006	4
30	MR-90/Front Dome	Fire control radar	1999	2006	8
86	V-46	Diesel engine (AV)	1999	2000-2002	86
1440	M120 Vikhr/AT-16	Anti-tank missile	2000	2002-2004	1440
125	9M317/SA-17 Grizzly	SAM	2000	2003	125
125	9M38/SA-11 Gadfly	SAM	2000	2006	63
40	Mi-8/Mi-17/Hip-H	Helicopter	2000	2000-2001	40
1600	R-77/AA-12 Adder	BVRAAM	2000	2001-2006	675
140	Su-30MK/Flanker	FGA aircraft	2000	2004-2006	21
14	Zmei/Sea Dragon	MP aircraft radar	2000	N/A	N/A
14	2S6M Tunguska	Mobile AD system	2001	2002	14
350	9M311/SA-19 Grison	SAM	2001	2002	350
2500	Igla/SA-18 Grouse	Portable SAM	2001	2001-2003	2500
3	Il-38SD/May	ASW/MP aircraft	2001	2006	1
5	Ka-31/Helix	AEW helicopter	2001	2003-2004	5
20	Kh-35 Uran/SS-N-25	Anti-ship missile	2001	2006	5
310	T-90S	Tank	2001	2001-2005	310
225	9M317/SA-17 Grizzly	SAM	2002	N/A	N/A
250	V-46	Diesel engine (AV)	2002	2004-2006	150
308	V-46	Diesel engine (AV)	2002	2002-2006	230
3000	9M133 Kornet/AT-14	Anti-tank missile	2003	2003-2006	3000

3	AK-100 100mm	Naval gun	2003	N/A	N/A
3	Kite Screech	Fire control radar	2003	N/A	N/A
6	Mi-8/Mi-17/Hip-H	Helicopter	2003	2003-2004	6
6	MR-123/Bass Tilt	Fire control radar	2003	—	—
1	Gorshkov	Aircraft carrier	2004	—	—
3	Ka-27PL/Helix-A	ASW helicopter	2004	—	—
5	Ka-31/Helix	AEW helicopter	2004	—	—
12	PS-90A	Turbofan	2004	—	—
28	2S6M Tunguska	Mobile AD system	2005	—	—
300	9M311/SA-19 Grison	SAM	2005		
2	Akula-2	Nuclear submarine	2005	—	—
28	BM-9A52 Smerch	MRL	2005	2006	10
16	MiG-29SMT/Fulcrum	FGA aircraft	2005	—	—
28	3M-54E1 Klub/SS-N-27	Anti-ship missile	2006	—	—
80	Mi-8/Mi-17/Hip-H	Helicopter	2006	—	—
18	Su-30MK/Flanker	FGA aircraft	2004	2005	—
300	T-90S	Tank	2006	—	—
3	Talwar/Krivak-4	Frigate	1999	2003-2004	—

Source: <http://armstrade.sipri.org>

As per reports Russia has offered MIG-35s to India.¹¹ Each of the fighter planes that the Indian Air Force would buy could cost between Rs 150 crores to Rs 200 crores, while the total contract would well be over Rs 25,000 crores. (Tsan, L. Foshko. 2012: 151). There are indications that the Indian government could be issuing the Request for Proposals (ROF), finally putting the process for the purchase in motion. The aircrafts are an improved version of the MIG-29s with capabilities that MIG Corporation claims no other fighter aircraft in the world has the same capability. The Russian experts have indicated that the aircraft has an all aspect thrust vector control, can actually stop mid-way during flight. This quality would not only allow the fighter to get better accuracy in its attack role, but would also help to avoid an enemy fighter chase.

In a recent development Russia's state-owned arms supplier Rosoboronexport (a Russian state owned arms company) reportedly is in talks with India over the delivery of Mi-17 multi-role military helicopters (Malek, Martin 2004: 394). According to the Russian news agency RIA Novosti about 70 countries use the Mi-17 for military service. There are also negotiations to modernize the Indian military's Mi-24 helicopter gunship.

In addition to, Rosoboronexport delivered Mi-24 multi-functional¹² military helicopters to India including military technical cooperation worth ten billion dollars for the creation of fifth generation aircraft. Russian Sukhoi-30 fighter's deal was signed for forty aircrafts and was delivered to India in 2010. According to Russian sources, the lease of two nuclear submarines was also in the discussion. Under a 1.8 billion dollars contract for a ten-year lease of two nuclear submarines, India recently filled the one of its gap of Russian INS chakra AKULA II class submarine, received by India on 23 January 2012 (Foshko, K. 2012: 159). India and Russia claim that leasing Akulas would not violate the provisions of the nuclear nonproliferation treaty, which they interpret as covering only nuclear weapons technology and not nuclear-powered submarines. Under this scheme India was counted as the sixth country having a nuclear submarine with a striking range of 3000 KM, equipped with 28 nuclear capable cruise missiles.

¹¹ Editorial, "The MiG-35 deal India and Russia". The Tribune Chandigarh, November 20, 2005.

¹² Russia, India in talks over Mi-17 contract, [http:// www.India-defence.com/](http://www.India-defence.com/).

CHAPTER- 5

Indo-Russian Joint Ventures: An Attempt to Revive the Defence Relations.

5.1 Introduction:

Indo-Russian bilateral cooperation in the sensitive defence field has engendered a high level of mutual trust and broad compatibility of geo-political interests. India found it difficult to manufacture the similar type of Russian sophisticated weapons. It became then essential for India to import the Russian made arms to maintain the long term history, in defence sector. Therefore, in this connection the first part of this chapter traces the conventional arms contracts between the time tested partners including the major arms deals to modernise India's defence technology. As to some extent Russian conventional arms supply to India declined because of several factors included New Delhi's diversification of arms to other suppliers. On the hand both the nations made an attempt to review the defence cooperation through joint research, design, and production in arms for mutual benefits and a basis for long term future defence cooperation, is discussed in detail in the second part of this chapter.

5.2 Indo-Russian conventional and joint military cooperation:

As cooperation in the field of defence constitutes one of the most important features of Indo-Russian bilateral ties, both India and Russia have now shifted their focus on long-term-basis such as transfer of technology, modernization of existing equipment, and access to the latest equipments and weaponry in the Russian arsenals. Most promisingly, the defence relationship had moved from a traditional importer model into a more symbiotic relationship involving joint research, design, and production (F. K., Tsan. 2012: 148). Although the change is gradual, however, many of the fruits of increased cooperation became apparent.

In case of conventional arms procurement India had purchased most advanced military systems from foreign suppliers, especially from Russian defence companies. New Delhi found it a bit difficult to manufacture indigenous weapons systems similar to Russian supplied submarines, tanks, or combat aircraft¹. Russia had sought to meet Indian demands and transferred defence technologies to India. During the March 2010 visit of the Russian Prime Minister Vladimir Putin to New Delhi, the Indian Prime Minister Manmohan Singh described Russia in fulsome terms:

“Relations with Russia are a key pillar of our foreign policy, and we regard Russia as a trusted and reliable strategic and defence partner. Ours is a relationship that not only stands independent of any other, but whose significance has grown over time. Our partnership covers areas such as defence, civil nuclear energy, space, science and technology, hydrocarbons and trade and investment²”.

The Cabinet Committee on Security cleared a deal of more than 3,000 million Dollars to buy an additional 42 Sukhoi-30 MKI fighters from Russia in 2010. The deal came on top of the 230 aircrafts already contracted from Russia in three deals worth a total of 8,500 million Dollars. The initial contract was for 50 fighters, at 1,460 million Dollars. Russia has also provided India with more than 130 T-90 tanks³ and more are being sent for assembly in India.

India had received from Russia various MiG fighter aircrafts (MiG 21, 27 and 29), several T-90 Main Battle tanks, the most modern and best protected tank of the Russian army, AWACS (Airborne Early Warning and Control) Medium-Lift (Mi-17-IV) Helicopters, R-77 air-to-air missiles, Kilo class/type 877E and Schuka B-class nuclear

¹ Sieff, Martin. (6 March 2008). BrahMos Progress—Part 1. United Press International http://www.upi.com/Business_News/Security-Industry. Accessed on 29 December 2012.

² M, Singh. (12 March 2010). Prime Minister's statement at the Joint Press Conference with his Russian Counterpart in New Delhi, www.pmindia.nic.in. Accessed on 5 January 2013.

³ Joseph, J. “Sukhoi Deal Cleared”, Times of India, June 26, 2010.

attack submarines, and various radars for air and sea surveillance and combat⁴. At the MAKS 2011 International Aviation and Space Salon, held at Zhukovsky airfield outside Moscow from August 16 to 21, 2011, India signed a contract to buy 80 Russian Mi-17 multi-role tactical transport helicopters, giving India around 200 of these helicopters in total⁵. These sophisticated helicopters should fill the gaps of India's air forces arms and a step to move ahead in the air defence technology in the south Asian region.

During the 13th annual summit on 24 December 2012 between India and Russia, the defence deals pertained to the 3.5 billion Dollars tag for 42 Sukhoi Su-30 fighter jets and 1.3 billion dollars contract for the delivery of 71 Mil Mi-17 military helicopters by 2018, demonstrating Russia's importance in the Indian defence industry, including the production of the world's best BrahMos supersonic cruise missiles⁶. Apparently, keeping in mind Putin's visit of December 2012, the Cabinet Committee on Security (CCS) also cleared proposals for procuring military hardware from Russia. The proposals included procuring around ten thousand Invar missiles from Russia for Indian Arm Forces, T-90 tanks and over two hundred air-launched versions of the BrahMos supersonic cruise missiles for the Indian Air Force. (B. B., Basu. 2008: 504). Besides, India imported large number of weapons from its primary supplier Russia the important ones are given below in detail.

Table 5.1 is a summary of key Russian arms contracts with India from 2008-2013.

Contract	Price	Delivery	Notes
Mi-17 1V helicopters	\$662m	2008	—

⁴ Security trends in South Asia, (November 14, 2010). India, Russia expand defence Cooperation, India defence, www.security-risks.com. Accessed on 2 January 2013.

⁵ "India, Russia to Review Defence Ties", The Hindu, October 5, 2011. Accessed on 29 June 2012.

⁶ "Defence Contracts between New Delhi and Moscow" The Hindu, December 27, 2012. Accessed on 27 December 2012.

3M-54 Klub/SS-N-27 Anti-ship missile	N/A	2009	—
Mi-17 HIP-H80	58.48 bn.	2010	To be weaponised and replace Current Mi-8 fleet. Final delivery due 2014.
MIG 29K Fulcrum 29	1.5 bn	2011	Including four two-seat MiG-29KUB. For INS Vitramaditya(ex CV Gorshkov). As of mid-2011, 11 aircraft delivered
leasing of two Akula II nuclear submarines	\$1.8bn	2011	First hull currently being readied for sea trials
40 Su-30K and 42 Su-30MKI fighters	\$4.9bn	2011	Delivery to be complete by 2016-17.
Upgrade of 66 MiG-29 Fulcrum	\$890m	2011	—
Construction of three Talwar frigates	\$1.1bn	2012	—
Admiral Gorshkov aircraft-carrier equipment	\$1.6bn	2013	Cost is for overhaul and upgrade, and the delivery of 16 MiG-29Ks.
License production of 1000 T-90S tanks	—	2020	Deliveries over the next 15 years

Sources: Moscow Defense Brief, Centre for Analysis and Strategic Technologies, available at <<http://www.mosnews.com/money>>, accessed on 12 December 2012.

New Delhi is planning to expand its participation in air defence with the Igla-S portable SAM, the Tor-M2E SAM, the Pantsir-S SAM and anti-aircraft artillery system, and other Russian-developed weapons including six diesel electric submarines with the Amur-1650. Both the countries are planning to set up Joint Venture for the manufacture of Russian helicopters in India that will promote the development of a high technology based domestic aerospace industry (B. Kumar. 2004: 171).

Apart, from the above mentioned weapons that India imported from Russia, Moscow increased its willingness to co-produce defence arsenals. Russia engaged with India since 1998 in more joint research, development, and production of new military systems. The defence cooperation is not limited to buyer seller relationship but jointly production of defence equipments and sale to other countries (B.M., Jain. 2003: 19).

In order to understand the joint ventures in defence technology between New Delhi and Moscow lets first understand the meaning of the term 'Co-production' or 'Joint Venture'. A joint venture is a contractual business undertaking between two or more parties. It is similar to a business partnership, with one key difference. A business partnership generally involves an ongoing long-term business relationship, whereas a joint venture is based on a single business transaction. Individuals or companies choose to enter joint ventures in order to share strengths, minimize risks, and increase competitive advantages in the market. Joint venture can be distinct business unit (a new business entity may be created for the joint venture) or collaborations between businesses. In other words a joint venture means an association of two or more individuals or companies engaged in a solitary business enterprise for profit without actual partnership or incorporation. Russian president Medvedev's explained the joint cooperation in defence during his visit to India in 2008 that "We have such plans in rocket building and aviation⁷", to strengthened bilateral strategic and defence cooperation.

⁷ Reuters. (December 5, 2008). 'Russia and India Sign Nuclear Pact', International Herald Tribune.

As previously discussed Indo-Russian relation is not narrowly confined to a 'buyer-seller relationship'. They have gone beyond that stage and showed that the two nations trust each other, as evidenced in their joint design and production of weapons such as BrahMos supersonic cruise missile.

5.3 Major joint development and production projects:

India and Russia explored common synergies in co-developing more weapon platforms. Sharing of both costs and efficient practices and interaction of best scientific and research minds augment their military capabilities. This may also be seen within the context of Russia's own massive military modernization programme. India and Russia have a range of joint projects especially in defence the important ones are discussed below.

5.4 BrahMos: The Supersonic Cruise Missile.

The joint venture to produce BrahMos missiles was established in India through an inter-Governmental Agreement between New Delhi and Moscow signed in early February 1998 the acronym BrahMos is perceived as the confluence of two great nations represented by two great rivers, the Brahmaputra of India and the Moskva (D. A., Mahapatra. 2006: 8) of Russia.

The Brahmos supersonic cruise missile with the range of 280 km is based on 3M-55 X missile designed by India's Defence Research and Development Organization (DRDO) and Russia's Mashinostroyenia (NPO) under BrahMos airspace. Its cruising speed is between Mach 2.5–2.8, setting it apart from the subsonic Harpoon⁸, its Western counterpart which is about three times slower than BrahMos (M. Cameron. 2009: 172). The missile has been a stunning success, with

⁸ It is an all-weather anti-ship missile system manufactured by United States 'Boeing Defence, space and security'. The modified missile became a potential threat to India. As United States of America had delivered harpoon missile to Pakistan in lieu of its support on war on terror, but it became a trauma for India to develop and manufacture the similar weapon.

India's Rajput and Delhi-class destroyers, and Talwar frigates all being fitted with the missile. It is cited as the shining example of co-production between the two partners.

The two countries also decided to jointly market BrahMos to other countries. Interest towards this Indo-Russian defence technology had displayed by Indonesia, Malaysia, UAE, South Africa, Chile and other states. The list is constantly expanding and can eventually include ten to fifteen countries. (K. Foshko. 2011: 43) The main JV customer is India, has already made payment for its orders to the tune of 2 billion Dollars. According to the JV CEO, Sivathanu Pillai, within the next decade, his company will be able to increase the production of the BrahMos supersonic cruise missiles up to a 1,000 per year (P. Stobdan. 2010: 160). The BrahMos missiles incorporated advanced technologies, which Moscow had not made available to China or any other country, but are manufactured in India (M. S., Roy. 2010: 492).

At present, the Indo-Russian joint venture offers its potential customers four versions of the BrahMos missile such as ship-to-ship, surface-to-surface, surface-to-ship and ship-to-surface. The sea-based and land-based versions were successfully tested and put into service by the Indian Navy and Army respectively. BrahMos has also completed work on the development of two more missile modifications – air-based and underwater-deployed. They are currently ready to test and launch. (S. Tatiana. 2010: 152-56).

5.1 India's P.M. Monmohan Singh and Russian President Putin.



Source: www.brahmos.org.in.

In August 2011, India's BrahMos Aerospace signed a Memorandum of Understanding (MOU) with two Russian aviation institutions i.e. with Moscow Aviation Institute and Mashinostroyeniya Corporation, to set up a centre of excellence for developing technologies of high-speed aircrafts and missiles. An important goal is to develop a hypersonic version of cruise missiles⁹. A faster new variant BrahMos II missile should be ready by 2014 and should reach speeds of Mach six (Rod, Thornton. 2012: 105). The IPR agreement has cleared the deck for more such projects. In view of difficulties and snags in the development of indigenous technologies, such collaboration might be the best way for India to acquire and develop new technologies.

⁹ "BrahMos Agreement," The Hindu, August 18, 2011.

5.5 Fifth Generation Fighter Aircraft:

Since 1990's both the partners have been considering joint development of fifth generation multirole fighter and transport aircraft. The intention was reiterate during the December 2005 visit of the Indian Prime Minister to Russia. Finally, on 18 October 2007 an inter-governmental agreement was signed in Moscow for joint development of an advanced multifunctional fighter aircraft of the fifth generation. This project became one of the biggest collaboration programmes worth ten billion Dollars between the two countries in the military-technical cooperation (L. Sergi, 2008: 9).

Under the project, India's Hindustan Aeronautics Limited (HAL) and Russia's United Aircraft Corporation (UAC) set up a fifty-fifty joint venture on the lines of the Indo-Russian BrahMos Aerospace. (Tsan, K. F. 2012: 10). PAK FA the acronym for Perspektivnyi Aviatsionnyi Kompleks Frontovoi Aviatsii (literally Prospective Aircraft Complex of Frontline Aviation). India renamed it as fifth generation fighter aircraft should have a maximum range of 5,500 km and with a speed of Mach 1.82 (Mohanty Arun 2011: 6). According to Russian ministry of defence (2011), It is an amazing aircraft having a Radar Cross Section (RCS) of just 0.5 square meter as compared to the Su-30MKI of about 20 square meters. Sukhoi's chief Mikhail Pogosyan confided IAF officials that PAK FA should be more advanced than America's F-22 Raptor, which is still the world's foremost fighter aircraft (R. Thornton. 2012: 105).

The contract which Bangalore-based Hindustan Aeronautics Ltd (HAL) signed with Russia's United Aircraft Corporation (UAC), committed to build two hundred and fifty fighters for the IAF and an equal number for Russia. The option for further orders was kept open (A. Mohanty. 2011: 7).

The Government is required to spend another 15 billion Dollars to develop and maintain the extensive infrastructure needed to base, operate and sustain such advanced platforms. In addition, the India sent its engineers to Russia for additional project related training completed their courses in July 2011. According to expert estimates, its development took few years i.e. flight tests of the aircraft was completed in 2009 and it should enter the Indian Air Force by 2017 (Stobdan, P. 2010: 158). India will use the prototype technology and designs in their own plane¹⁰. India shared Intellectual Property Rights (IPR) on the aircraft (K. Foshkko. 2011: 34).

5.6 Medium transport aircraft development programme (MTA11-21):

Another joint military venture is Medium Transport Aircraft development programme (MTA). Negotiation on this project began since 2000 and finally, in December 2010 joint venture to build the MTA (11-21) was announced between HAL and Ilyushin, to design and built a new medium lift transport aircraft known as the Medium Transport Aircraft (MTA) with a range of 2500 km and payload of twenty tones. The aircraft is significant chiefly of its range and speed. As India is surrounded by the two rival nations Pakistan and China. The contract will move India ahead in its air arms technology in the South Asian region. It is based on the existed design of the Ilyushin 214 aircraft. As India had a long association with the Russian Ilyushin company and had imported heavy-lift transport aircraft from this company such as the Il-76. One hundred of these aircrafts are in service in Russia's air force and thirty five in the India's¹¹ air force.

The seven hundred million Dollars project became part of the indo-Russian military technical cooperation programme. India's state owned company HAL (Hindustan Aeronautics Ltd) and Russian Aircraft maker Irkut are shareholders in this investment. There was lack of consensus on this project as Russia wanted 19.5 tons

¹⁰ Rajat Pandit. (September 12, 2010). Fifth generation shown to Indian partner. The Hindu, New Delhi.

¹¹ Asif Majeed. (January 27, 2012). New Indo-Russian Joint Aircraft Company, Pakistan Defence, www.defence.pk/forums/india-defence/75106-mta-limited-newindo-russian-joint-aircraft-company.html. Accessed on December 29, 2012.

of carrying capacity while the India is satisfied with fourteen to sixteen tones. Russia is in favour of developing PS-12 engine to power the aircraft at the cost of three to four billion Dollars. India wanted to use French or US engines (J. Bakshi. 2006: 460).

This project is in its initial stages, with costs being split evenly between the two partners. A prototype joint aircraft should be built in six to eight years. It will be modeled on the Il-214. The goal is produce around two hundred aircrafts with thirty percent available for export. The aircraft is designed to replace India's aged An-12 Cub, An-24 Coke and An-32 Curl medium aircraft transports (Rod, Thornton. 2012: 106). If, however, the MTA/Il-214 is not ready on time India may buy C-130Js from the United States¹² which is against the Russian interests.

5.7 Indo-Russian Aerospace Cooperation:

India's space research programmes are closely linked to the history of Russian and world space exploration. Indo-Russia space cooperation mainly focuses on the important lines of activity as space navigation, lunar exploration and man controlled space flight programmes. During president Putin's visit to New Delhi in December 2004, an agreement was signed between Roskosmos and ISRO on the joint use of Soviet Era Global Navigational Satellite System GLONASS, (Globalnaya Navigatsionnaya Sputnikovaya Sistema) the Soviet-era global satellite navigation system that India had decided to cooperate on making fully functional including the launching of new Russian satellites from Indian launch pads with the help of Indian vehicles in 2007. The deal will reduce India's dependence on the US global positioning system (GPS) (P. Stobdan. 2010: 171). Vladimir Radyuhin specialist on Indo-Russian relations views that GLONASS should be used by both the countries for civil as well as military purposes.¹³ Although, India took a decision to participate in Europe's GALILEO satellite navigation system, but the European system incurred higher cost and was not superior to the Russian one, judged by its technical

¹² India Buys C-130J-30 Hercules for special forces, Defense Industry Daily, www.defenseindustrydaily.com/india-to-purchase-6-c130j. Accessed on 10 January 2013.

¹³ Vladimir, Radyuhin. (December 7, 2005). "India-Russia, Space Cooperation". The Hindu, New Delhi.

performance. GLONASS became operational on a global scale before GALILEO (P. Stobdan. 2010: 173).

As of January 2011, India joined the Russian GPS network. India signed an agreement to get access to high precision signals while manufacturing GLONASS based navigation devices jointly with Russia. Thus, in October 2011, when access to the (now functioning) GLONASS military system was offered to the Indian defence minister (A.K. Antony) it was readily accepted (R. Thornton. 2012: 108).

Apart, from GLONASS, India approached Roskosmos to arrange a space flight on board the 'Soyuz spacecraft' for its astronaut as part of India's preparation for launching its own manned space vessel In March 2008. Russia played an expected role and provided facilities to India to launch the spacecraft. Riding high on the success of its first research satellite, Chandrayaan-1, India's Space Research Organisation (ISRO) is preparing to launch Chandrayan-2 (K. Foshko. 2011: 168). The mission, which is scheduled for 2013, includes a lunar orbiter and two rovers—one lander rover built by Russia and the other a second smaller rover built by India. In addition to India's astronaut's lunar landing is scheduled for 2020, and participation in international expeditions to Mars is tentatively planned for 2030 with the Russian assistance¹⁴.

5.8 Nuclear energy cooperation between India and Russia:

Nuclear energy is yet another important area where bilateral military cooperation has a bright future. The end of India's nuclear apartheid has opened avenues for stronger cooperation between India and Russia in this area. Russia assisted in the construction of Kudankulam nuclear plant with two reactors in Tamil Nadu. Both the units with installed capacity of one thousand megawatts each are ready and are waiting to be commissioned¹⁵.

¹⁴ Kundu D. Nivedita (23 April 2010). Indo-Russian space cooperation, The Hindu.

¹⁵ "India's Energy Cooperation with Russia". The Tribune, January 21, 2013.

During Russian President Medvedev's first-ever visit to India in December 2008, an agreement was signed for the construction of four more reactors with Russian technical assistance at Kudankulan (Manpreet, Sethi. 2009: 191). These reactors are operated and commissioned by the nuclear corporation of India under international atomic energy agency (IAEA) safeguards. In 2009, close on the track of the Indo-US civil nuclear deal (2008), New Delhi and Moscow sealed a breakthrough long-term pact for expanding civil nuclear cooperation free from any restrictions on New Delhi and guaranteed it against any curbs in the future. This deal ensured transfer of technology and uninterrupted uranium fuel supplies to India's nuclear reactors¹⁶. Accordingly, Russia made its uranium delivery to India in April 2009 (F. K., Tsan. 2012: 159).

Thus the Prime Minister of India Manmohan Singh while addressing a joint press conference with Russian President Dmitry Medvedev, in 2009 stated that:

"Today, we have signed an agreement that broadens the reach of our cooperation beyond supplies of nuclear reactors to areas of research and development and a whole range of areas in nuclear energy. India's ties with other countries will never be at the cost of time tested relationship with Russia (Kundan, Das. 2008: 80-81).

¹⁶ "India, Russia Sign Nuclear Deal". The Times of India, December 7, 2009.

The below given map 5.2 shows India's nuclear cooperation with different countries included Russia.



■ Countries with which India has inked nuclear deals and agreements
— Countries where India is in talks with over uranium exploration and supply or where Indian private companies has already acquired equity investments in uranium mines.

Source: <http://www.sagepublications.com>.

During Putin's visit to India in 24 December 2012 the two sides decided to embark upon an ambitious roadmap for deepening their cooperation in civilian nuclear energy and construct 16 to 18 nuclear energy plants in India of 1,000 megawatts each, which may cost 45 billion dollars at current price. This long-term map may be up to the year 2030. The completion of all the proposed nuclear plants would mean that the Russian contribution to the Indian basket of power production would be 22,000 megawatts or over 20 percent of India's current total power production with the help of Russia alone¹⁷. Therefore, nuclear plants were seen as highly successful ventures that had opened the door to greater Russian involvement in India's nuclear energy field.

¹⁷ "India and Russia, Cooperation in the nuclear energy sector", The Hindu. New Delhi, December 26, 2012.

5.9 Factors Retarding Major Defence Cooperation:

Despite Indo-Russian close defence cooperation which entered from buyer-seller to joint production, the recent developments indicate that bilateral defence cooperation is not smooth. The controversy regarding the Admiral Gorshkov is an example in this context. Russian coercive tactics on India to withdraw Indian troops from Tajik Air base has been viewed negatively by India's policy makers. The present state of defence cooperation between two countries is not motivated by ideological considerations. There are many factors which are creating problems in smooth defence cooperation such as inefficiency, delay, high cost and difficulty in obtaining spare parts and Russian defence industry lacks modern technology etc.

5.10 Delay Factor: In the arms procurement.

Not a single state defence order had been fulfilled completely and on time (Ashok, Sharma. 2009: 3). There is also a big gap between real and official prices which further added the high import duties which cannot be reduced or abolished. Russia emerged as petro-dollar state which can help Russian military industry.¹⁸ The delivery of the project 877 EKM diesel submarine delayed for six months due to problems with the club-5 system.

The Indian Navy objected that in six consecutive tests firing in 2007 the missile failed to hit their target. The 3M54 EI anti-ship missile and the 3M-ME land attack missile are also delayed. Admiral Gorshkov is recent example in delay factor which deteriorated Indo-Russia defence relations. The aircraft carrier, Admiral Gorshkov purchased at the cost of 1.5 billion Dollars was to be refurbished in the Sevmash shipyard in Russia. It was estimated to be ready in 2008. Medvedev described the Gorshkov issue a difficult experience in the Indo-Russian defence cooperation. He

¹⁸Nikita, Petrov.(November 1, 2008). Arms BIZ Woes-part 2, <http://www.com/international security/industry/analysis/>. Accessed on 13 January 2013.

stated in July 2009 that the deal must be completed otherwise it will affect the bilateral defence ties¹⁹.

After years of hard bargaining, both the countries renegotiated the terms of the contract. When Putin visited New Delhi in March 2010, the two governments established the new price for the carrier project and its complement of warplanes estimated at about 2.34 billion dollars. The current date for commissioning of the admiral Gorshkov to India is 2013.

In his report the comptroller and Auditor General (CAG) in 2009 had made scathing remarks about its cost condition and delay. Actually the vessel was sold free but contracted at cost of RS 974 cores for its refill and modernization the revised demand for 2.9 billion Dollars. The deal may finally be settled around two billion dollars but CAG said, (R. Weitz. 2012: 12). it is an overspend for a vessel which in his view twenty years old and on the other hand he said that a new could be built at the same cost. In 2009, Indian defense stakeholders publicly expressed their unhappiness with the delays in the delivery of AWACS system and the concomitant disputes over pricing.

India expressed concerns about the quality and timely delivery of other Russian naval purchases. For example, they have objected to the lengthy time it has taken Russian shipbuilders to deliver some multi-role frigates and to upgrade the Indian Navy's fleet of Kilo class diesel submarines, originally purchased from Russia between 1986 and 2000. India also suffered due to delays in the scheduled delivery of three modified Krivak III class (known in India as Talwar class) guided missile frigates which are under construction at Russia's Yantar shipyard in fulfillment of a 1.6 billion Dollars contract was signed in 2006 with Rosoboronexport. The original schedule for the delivery of the three ships was April 2011 and then October 2011. It was not until January 2013 that India received the frigates. Although India imported

¹⁹Medvedev. (July 2, 2009). Completion of Aircraft Carrier for India, RIA Novsoti, rian.ru/military-news/20090702/155413447.html, Accessed on 29 December 2012.

ships like Talwar (Sword), INS Trishul (Trident), and INS Tabar (Axe), but these ships lack Russian made Klub cruise missiles of the original Talwar-class²⁰.

5.11 No More Friendly Prices:

Soviet Union's main motive behind the arms transfers to India has been dominated by its geo-political strategic interests. On the other hand, Russia transfers arms to India from commercial point of view. They started demanding unreasonably high prices for their hardware. From cost point of view Russian arms now equal to Western but lag behind the quality point of view. Now Russia is not prepared to supply weapons to India on prices and terms offered by the former Soviet Union. The rupee payment regime has come to an end, now Russia insisted on hard currency payments (Jyotsana, Bakshi. 2006: 455). Former Indian Navel Chief Admiral Arun Prakesh is a strong critic of emerging trend. He said that once you create a dependency for its lifetime, foreigners will continue to exploit us and we need to find alternative focused on developing indigenous capabilities. He made an indirect reference to the uncertainties in Indo-Russian defence cooperation such as cost overrun delay and poor quality that India must be aware of foreigners bearing gifts.

5.12 Divergence of defence Sources:

Due to rising economy of India there are many defence companies in the developed countries such as US, Israel, Britain, France etc that agreed to provide more cost effective arms packages to India in comparison to Russia because they wanted to capture the Indian market. Israel is India's largest defence supplier and the defence ties between the two countries amount to about seven billion Dollars. Director General of the Israeli Defence Minister, Pinches Buchris, during his visit in January 2008 signed deals on intelligence sharing and joint production of the Python quick reaction missile. India's cabinet committee on security cleared a 2.5 billion Dollars joint production deal for the missiles manufacture in India.

²⁰ Kumar. (July 29, 2009). Indian Navy Chief 's Visit to Russia, IDSA Comment, <http://www.idsa.in/idsacomments/>, Accessed on 29 November 2012.

Israeli companies have supplied India with a wide range of military equipment, including Phalcon airborne warning and control (AWAC) aircraft, Barak missiles, which can detect targets as far as 400 Km, in a new 800 million Dollars deal, unmanned aerial vehicles (UAVs) and Tavor rifles. (Richard, Weitz. 2012: 82). Several further deals were agreed during 2009, triggered in part by the Mumbai attacks. The navy, for example, was quick to acquire five aerostat-programmable radars from Israeli Aerospace Industries (IAI) to plug gaps in its coastal-security system. In April 2011 India successfully launched its all-weather satellite, built by IAI, to help monitor its porous borders with Bangladesh, China and Pakistan. The latest major deal between the two countries is a 1.4 billion Dollars contract for the development and procurement of a medium-range surface-to-air missile system, based on IAI's Barak-1 long-range naval air-defence system. Under the contract, IAI will work with India's Defence Research and Development Organization (DRDO) to develop an air-defence system capable of detecting and destroying hostile aircraft, cruise missiles and surface-to-surface rockets at a range of 70 to 80 km. The purchase of the Barak missiles from Israel by India was a tactical necessity since Pakistan had purchased Lockheed P-3 Orion maritime surveillance aircraft and 27 Harpoon sea-skimming anti-ship missile from the United States

India and United States had forging closer defence ties after 11 September 2001 attacks in New York and Washington and the 13 December 2001 attacks on the Indian Parliament. India purchased LPD USS Trenton, six Sea King helicopters and six C-130J transport aircraft²¹. In early 2009, however, these contracts were dwarfed by a 2.1 billion deal under which India purchased eight Boeing P-8I Poseidon multi-mission maritime-reconnaissance aircraft (MRAs) from Boeing²². Indian officials said that the aircraft had become a priority after the Mumbai attack. Following in July 2009 final agreement relating to the End User Verification Agreement, necessary under US law to ensure compliance with military technology-transfer requirements, the first of

²¹ Pandit Rajat. (January 4, 2002). U.S. looking at closer defence ties, The Times of India.

²² "India's Defence contract with U.S", The Hindu, New Delhi, February 8, 2009.

the Poseidon aircraft, which have an anti-submarine warfare capability, is scheduled to deliver by 2013.

Nevertheless, the growing competition from Western companies, problems with past Russian arms sales, potential cuts to defence budget, and the increasing sophistication of India's indigenous defence industry could lead New Delhi to buy fewer Russian arms. India diversified its foreign weapons suppliers despite the higher costs and complexity involved in maintaining a variety of platforms. Defence officials of India tried, with limited success, to buy more indigenous defence systems. India's arms industry had become more sophisticated and manufactured wider range of weapon systems such as tanks, missiles, aircrafts etc. The Indian Defence Research and Development Organization (DRDO) have focused resources on designing anti-ship, anti-tank, and longer-range ballistic missiles.

A further factor is the inertia created by India's four decades of heavy dependence on Russian military hardware. India's strategic analysts have argued a case against this reliance, pointing out that India must diversify its sources of weapons procurement because of the threat associated with reliance upon a single supplier.

Britain is another emerging partner in the growth of the Indian arms sector. The arrival of batch of two Hawk MK 132 advanced jet trainer (AJT) aircraft from the UK to India. These developments clearly indicate the trend towards diversification of the requirements of the Indian military.

While a move such as buying American equipment has been quite rare for India until very recently, it is indicative of the fact that Delhi is now quite willing to source its military hardware from the US. Recent purchases have included 10 C-17

transport aircraft, 8 P-8 maritime patrol aircraft and 100 jet engines from General Electric to power India's new indigenous Tejas fighter²³.

5.13 Problem of Spare Parts:

The unavailability of cheap spare parts from Russian side is another obstacle in Indo-Russian defence relations. The problems existed even during the Soviet period. Soviet weapons were cheap but not the spare parts. India was at the mercy of the supplier for spare parts. There was lack of openness on the part of Soviet/Russian side and also lack of communication and understanding of each other's system. So Problem of spare parts as well as maintenance and repair from Russia for the weapons is there. In addition due to bad climatic conditions in India, there is a greater wear and tear of defence equipments. Thus it became a drawback in the defence cooperation between India and Russia. These issues are being progressively addressed²⁴.

5.14 Quality Concern of Russian defence technology:

There have also been complaints from quality point of view²⁵. A number of shortcomings are found in the latest T-90 tanks supplied to India. Russian defence sector has been facing the financial problem, most of Russian defence companies are controlled by the government and private companies have a limited role to invest in it. According to Sergei Ivanov, the former Russian defence minister, only 16 out of 37 holding companies had been established, and newly established companies are still unable to produce high quality of weapons. In India a social movement has been gathering storm over the years on the problem of MIG-21 crashing frequently, earning the sobriquet of "flying coffin" (P. Dash and A. Nazarkin. 2007: 85).

²³ Indo-Russian Joint Aircraft Company, Pakistan Defence, www.defence.pk/forums/india-defence/75106-mta-limited-newindo-russian-joint-aircraft-company.html, Accessed on 17 January 2012.

²⁴ Ranjana Mishra. (2003). India's military ties, world focus, 25, 432: 300.

²⁵ Editorial, "Problematic Partnership". The Hindu, New Delhi, November 21, 2009.

In September 2007 India suspended payments worth one hundred and fifty million dollar deal with Russian Ilyushin design bureau for up gradation of five anti-submarine patrol aircrafts (Il-38SD). Besides, India denied, to accept the delivery of the Russian ratified submarine INS Sindhuvijay because the vessels club-5 cruise missile system did not work the way they should (Richard, Weitz. 2012: 83).

Though, the problems in defence supplies concerning product support, cost escalations, delays in delivery and incomplete transfers of technology. Still, substantial arms imports continued to come from Russia. With a changing foreign policy orientation in India, the importance of arms imports from Russia had seen a declining trend. There was some uneasiness in Russia when India signed a Strategic Partnership with the USA in 2006, and there were talks of Russia being elbowed out as India's main arms supplier, particularly over the sale of the Admiral Gorshkov aircraft carrier. Nevertheless, overall Russia remains an important factor in Indian foreign policy debates. Moreover, at the broadest level, the Indian elite believed that a strong Russia is important for maintaining a desired international equilibrium, both supporting the idea of multi-polarity and a rule-based international system, within which India can continue its rise. This remains India's basic strategic synergy (P. Dash and A. Nazarkin. 2007: 143).

Despite, the fact that India went to other suppliers to procure military technology but still the defence cooperation between India and Russia is good especially in joint development of equipment. This not only provided India access to high technology but also modernized its armed forces. The fact that no other country is willing to provide such technology without attaching any pre-conditions.

Thus defence ties constitute the core of bilateral relationship between India and Russia. Moscow had provided the most advanced aircrafts, tanks, rocket launchers, missiles, frigates and submarines including licensed production of arms, missiles and aircrafts. On the other hand India is gradually developing its own defence industry.

Despite problems of faulty or obsolete equipment, Russia still has relatively low-cost and cutting-edge technology—especially in aeronautics—and, often, the willingness to transfer it or engage in joint development with Indian engineers. The same cannot be said for Europe or the United States, with their more onerous export regulations and lack of historical ties to India's defence industry²⁶.

These challenges are a warning sign, but can be as much an opportunity as they are a challenge. India will continue needing spare parts for its defence equipment of Soviet and Russian origin; further large-scale acquisitions from Russia.

²⁶ Kanwal, Sibal (June 13, 2011). India's Relations with the US and Russia, Force, <http://force.org.in/> . Accessed on 6 January 2013.

Conclusion

Defence cooperation is one of the important constituent of Indo-Russian bilateral relations. After independence India initiated the defence relations with the Soviet Union. It improved after the death of Stalin in 1953. He was against Nehru's policy of non-alignment and termed it as pro-capitalist. The International circumstances such as United States proximity towards Pakistan and China-Pakistan strategic closeness compelled them to come closer. Besides, India Pakistan rivalry and the gradual rise of China, Moscow remained a natural ally of India. During the cold war both the nations supported one another's external policies chiefly of common national and security concerns. Thus Soviet Union was seen as a truthful friend.

Defence cooperation reached its zenith when the treaty of friendship was signed in August 1971. It became one of the reasons of India's allegation in the Soviet camp and raised the questions towards India's policy of non-alignment. With the advent of détente between the two recognized super powers, India sidelined by Soviet Union to increase its status in the South Asian region. Although India imported its arms from other countries because of qualitative differences in Moscow's arms technology, still Moscow remained major supplier of arms to India.

The reformist policies of Michael Gorbachev (Perestroika and Glasnost), and adoption of realistic approach in international relations had affected the bilateral relations. Moscow has made efforts to recover its economic system through various sectors other than defence. As a results the defence budget was reduced which lead to cuts in the arms exports in the global arms market included India. Subsequently, the collapse of the Soviet Union and the end of the cold war impacted the defence cooperation.

India on the other hand adopted the policy of Liberalization, Privatization and Globalization and paid more attention towards domestic issues. India, as a primary recipient of Moscow's arms had then no alternative and went to other suppliers for the fulfillment of its defence needs especially in spare parts. With the course of time Russia stabilized its national apparatuses with the financial aid provided by

international monetary institutions that included USA. Moscow's defence industry was dependent on its primary defence recipients (India and China) for hard currency. India too required Russian arms technology for modernization and spare parts of Soviet/Russian origin weapons in the Indian inventory. A kind of reciprocity had existed. Therefore, both the countries became interdependent.

In order to restore the military cooperation the leadership of both the nations (P.V. Narasimha and Primakov) focused on common issues such as Moscow Declaration and an idea of triangle (India, Russia and China) to protect the multi ethnic societies from religious extremism and check the US power in the region respectively included belief in the multi-polar world order. Therefore, the time tested friendship was restored through the visits of high profile politicians.

India tested Pokhran-II in 1998 that was criticized world over. Sanctions were imposed on India by most of advanced nations. Moscow criticized in a muted way. While at the same period, agreed to assist India in the construction of nuclear reactors in Tamil Nadu. Besides, arms sales, cooperation in the civil nuclear cooperation, joint military exercises supplemented the strategic defence cooperation.

In a changed international scenario the twenty first century was marked by a new pattern of defence relations mutually beneficial for both the time tested friends. Increased emphasis on long term technology transfer, modernization and use of sophisticated Russian technology by India, was focused. The importance of defence cooperation is not restricted from earlier importer model but are, more significantly, expanding and deepening in terms of the co-production of state-of-the-art weaponry for export to competitive international military hardware markets. Besides, their identical perceptions of and approaches to vital issues such as the multipolar world structure, counter-terrorism for this purpose India and Russia formulated joint working group to maintain peace in both the countries included faith in the united nations organization.

On the other hand there are major concerns such as delay in the supply of arms in time, Cost escalations, supply of spare parts, quality concern, incomplete

transfer of technology and India's policy of divergence in arms procurements retard the defence cooperation.

The emerging global system necessitates the revitalizing of the defence relations in a framework which is mutually beneficial. The defence cooperation has not reached such a low as it was aftermath of Soviet collapse rather novelty is observed such as joint collaboration in new weapons. However, there is a need to address the problems on urgent basis in an environment of mutual understanding. Russia must respect India's aspiration in the international market and its freedom to diversify its defence sources.

Today, India's relations are not governed by ideology as it was done previously. India searches to increase its strategic depth in conventional military both in hardware and software. Thus, new partnerships are being forged. Therefore, If India gets an option to buy cheaper more advanced and efficient weapons than the Russian ones, Moscow must adjust to the changing realities by accepting the new developments or provide India weapons at competitive prices. While arms exporters such as U.S. France, Israel, Britain etc. are vying against each other for Indian market, it is logical to expect India to deal with these powers and procure weapons of latest technology. Many analysts would also agree that Russia needs to upgrade its defence facilities to compete with other suppliers. Russia should continue being India's top partner on nuclear energy development, a role currently challenged by the United States and, increasingly, Kazakhstan. A privately funded Indian-Russian consortium could develop civilian nuclear power in a number of Asian and African countries. There would be a reorientation of the Russian military-defense complex with centers of excellence in research and development in India and Russia with manufacturing units increasingly outsourced to India.

One may expect in the coming years that all issues that retard the defence ties would be resolved. It is only the arms sector that has been emphasized in Indo-Russian bilateral relations. Diminishing cooperation in this sector would likely steam off most of the meaning from the bilateral relations. However, it would be naive to expect that the Russian arms industries problems would be resolved. India must

recognise this imperative and at the same time keep Russia engaging without deviating from the current programmes with other powers. Moscow needs to deliver arms to New Delhi and meet India's timely arms contracts. Admiral Gorshkov deal has raised suspensions whether Moscow would meet the deadline of this contract.

Moreover, in spite of some degradation Russia still remains a power house of high technology and its fundamental science is still considered as one of the best in the world. It is only nation which provided India best military hardware, even some times before its own armed forces get it and help in building indigenous defence capability through cutting-edge technology transfer and licensed production. India is the only country with which Russia is ready to share its best technology, and the project of the fifth generation fighter aircraft is a case in this point. While France and China had evinced their keenness to be Russia's partner, India has been chosen as Moscow's privileged partner in the coveted project.

Russia's loss of a share of the traditional Indian arms market is inevitable, the joint relationship has the potential to remain strong in the coming decades with appropriate framing and expectations management. Russian needed to invest more into developing competitive defence products and delivery procedures rather than relying on inertia of historic ties and close relationships with the older generation of Indian military policy makers and defence procurement officials.

India needs to lobby in Russia to exercise better quality control over production and roll out storing facilities for weapons slated for export. Additionally, both sides should be interested in building more transparency and accountability into the relationship.

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Appendix A
Central University of Punjab
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Indo-Russian Defence Cooperation, 1991-2011
Admiral Gorshkov

Defence cooperation between India and Russia continued one of the major constituents of bilateral relations. India remains the biggest market for the Russian military hardware. Majority of India's arms are of Soviet/Russian origin. For nearly four decades ships, aircrafts and submarines were procured from Russia. Most acquisition had strong politico-military dimensions. Defense cooperation is limited not only to procurement but also to cover areas like service to service cooperation. A Joint Working Group on military technical cooperation has been set up to monitor Indo-Russian Defense Cooperation. India imported MiG aircrafts, T-72 tanks, Sukhoi fighters and many other weapons.

New Delhi has had extensive cooperation in space with the former Soviet Union and then with Russia. The Indian remote sensing satellites IRS-1A/1B were launched by Soviet launch vehicles on a commercial basis. The flight of Rakesh Sharma, the first Indian in space was from the Salyut Space Station in the Soviet Union¹. Indian space cooperation has continued with Russia and is proceeding well. Russia is now also customising India's military requirements. Besides, license production of SU 30 MKI and T-90s in India. The joint ventures played an important role in the defence cooperation New Delhi and Moscow is interested in upgrading their relationship in the Naval field. As India navy procured F class submarines, missile boats, petyas and submarine vessels etc.

After years of negotiations and hard bargaining on 20th January 2004, the suspense over India's proposed and long-awaited acquisition of the Admiral

¹ Ashok K Mehta, (December 4, 2002). India-Russia: Life after Defence, *The Pioneer*, New Delhi.

Gorshkov was over. The MOU was signed in 1998 and India agreed to buy the carrier and fund the refurbishing programme. On 11th January 1999 Indian Minister of Defense, George Fernandes acknowledged the agreement for the purchase of Russian aircraft carrier Admiral Gorshkov. The final deal was expected to be in Oct-Nov 2001, but disagreement over price stopped the deal. In 2002 the talk and negotiation again started over the price. Finally on 17th January 2004, all hurdles were cleared and the Indian Cabinet Committee on Security approved the Gorshkov deal². The refurbished aircraft carrier along with its complement of MiG air superiority fighters will add a lethal punch to the Indian naval armory.

The Indian Navy's technical committee made a positive recommendation and felt the vessel would be a useful. The price India seems to have got settled i.e. 1.5 billion Dollars seemed quite reasonable. The Indian Navy will thus become among the few nations in the world to maintain an aircraft carrier in its navy. Indian Defence Ministry officials insisted that Gorshkov was the only option in the world market to avoid a vacuum in the aircraft carrier department after Viraat's retirement in 2010³. The signing of this contract constitutes a landmark in the military-technical cooperation and will contribute to furthering of India's defence, technological and bilateral relations with Russia.

The 10800 square meter of flight deck will have a runway of 195 meters length, along with 14-degree ski-jump and wire arrester gear system, to aid short take off. The ship is being fitted with six new Italian make Wartsdila diesel generators capable of generating 1.5 megawatts of power each to meet its electricity requirements. Additionally for optimum efficiency of electronic equipment in tropical climate, four air conditioning plants are also being installed. In keeping with the prevailing International Marine Pollution standards, modern oily water separators and sewage treatment plant are being incorporated.

² "Indian Cabinet Committee on Security cleared the Gorshkov contract", Times of India January, New Delhi 22, 2004.

³ "Gorshkov will replace Viraat" The Hindu, New Delhi January 22, 2004.

After analysing all the characteristics of the ship it seemed that the deal is beneficial for both the countries, but there emerged differences over the additional charges made by Russia and the delay in the delivery. Now a new price was settled during the Putin's visit to India in 2010.

Thus, the signing of this contract explains the aspiration of the two countries for building mutual relations on a long-term basis, which includes military-technical cooperation. India and Russia have agreed to elevate their defence relationship to new areas and higher levels and add greater content to Indo-Russian partnership in this field. The deal for sale of the Admiral Gorshkov aircraft carrier by far exceeds regular military-technical cooperation between the two countries.