Chapter 11

Strategic Management for Military Capabilities: Seeking Ways to Innovate Military Capabilities - Indian Initiatives

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Introduction

India achieved independence from British colonial rule on 15 August 1947, and inherited not only the British system of parliamentary democracy, judiciary, police, bureaucracy, Higher Defence Management (HDM) etc, but also a battle tested armed forces modelled on the British military, which had been tested for a few centuries, including World Wars I and II. Since 1947, the Indian military has by and large succeeded in ensuring that India's geographical borders are safe, and its territory is not lost to foreign aggressors, despite having fought wars with China and Pakistan, and despite facing a proxy war from Pakistan. In addition, the basic organisation of the HDM has gradually evolved, though it still needs some fine tuning, while the doctrines for the Army, Navy, Air Force and Joint Military operations have been promulgated. The Indian Armed Forces and Coast Guard exercise frequently with their counterparts from advanced nations, and lessons learnt are progressively being incorporated.

Independent India is a 'status quo' power, which will fight only if attacked. Having two nuclear armed neighbours (China and Pakistan, who are also strategic allies, and who have territorial disputes with India), this country faces every conceivable form of challenge / threat. These are as follows:

1) A major challenge facing India's security and survival is poverty. Indeed poverty alleviation for its massive, growing population is the top most priority of the Government of India (GOI). This task requires the creation of 10 million jobs annually and major investment in agriculture, water, energy

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and infrastructure. Hence the Defence budget is only two percent of GDP, instead of the required minimum three percent. India's defence budget is roughly 33 percent of China's, and its two trillion US Dollars (US$) GDP is also roughly one third that of China's;

2) Terror, including maritime terror, has become a very major threat to India. This requires additional major funding for Homeland Security, and eats into the Defence budget;

3) Piracy, in the Gulf of Aden, Arabian Sea, Malacca – Singapore Straits, and the Asia–Pacific Region (APR) has also become a major challenge, since 90 percent of India's exports and imports are by sea, with 50 percent using the westwards sea route and the other 50 percent going eastwards. Hence considerable peacetime effort is being put in to keep the SLOCs safe. Today, strategic thinkers have rightly coined a new phrase, the "Indo-Pacific Region" (IPR), which includes the IOR and the APR. India's national interests are closely linked to the IPR;

4) The conventional military threats from Pakistan and China require a high level of military preparedness, especially since India wants to deter these two nations from embarking on a conventional or sub-conventional war, or both, with a "nuclear overhang". China has an estimated 300,000 troops in Tibet, bordering India, while Pakistan has about 500,000 troops facing India, along with about 43 terrorist camps, from which cross border terror strikes can be launched at short notice;

5) India is the only Nuclear Weapons State (NWS) with a No First Use (NFU) policy. This NFU policy does result in lowering nuclear tensions in South Asia, but it also requires India to maintain an expensive triad of land based, air based and sea based strategic delivery systems, which can survive a first strike from China or Pakistan or both;

6) Realising that space is vital to a nation's security (for real time situational awareness in the IPR) and growth, India has an ambitious space program, with a Mars mission in 2013, a manned low earth orbit in 2015, and 60 civilian space launches in the next five years;

7) Humanitarian aid during emergencies or natural disasters and Search and Rescue (SAR) at sea are becoming more frequent. The examples are the Indian response to the December 2004 IOR tsunami, the 2006 seaborne evacuation of Indian citizens (along with Nepalese and Sri Lankans) from

war torn Lebanon, and the 2011 seaborne evacuation of Indian citizens from war torn Libya;

8) Contribution to United Nations Peacekeeping Forces has been a regular feature of Indian policy. Indeed India is one of the largest contributors of troops, armed police and police for United Nations Peace Keeping Operations around the globe.

In recent years, closer ties with nations like the US, Japan, South Korea, Australia, Brazil and Russia, and the common vision of a future partnership that they are developing, are encouraging Indian leaders to seek strategic cooperation with key countries. India is also encouraged by the support it has received in its quest for a permanent seat in the UN Security Council from Russia, the US, Britain and France, who hold India as a natural claimant for that distinction. Since in the modern world the claim of a country for big power status goes along with its economic might and military strength and reach, and the support it receives from other countries in advancing such claims. India, is now trying to make progress in all these areas.

Meanwhile India's Prime Ministers and Defence ministers in the last decade have largely advocated a strong military to support our growing roles and aspirations in the region, and the Cabinet is in consonance with the view that due to India's strategic location, and considering the volatility of today's world, India needs to take initiatives towards economic, defence and strategic ties with countries for a stronger control of hostile situations whilst modernising its military capability simultaneously.

The aim of this paper is to analyse specific initiatives already taken, along with those still required towards enhancing India's strategic military capabilities.

1. Security Threat Environment in the Indian Context

1.1. General

India is witnessing extremely challenging times. The new millennium is likely to sustain more transformational, innovative and challenging trends than any other century in the past. The end of the Cold War and the beginning of a multi-polar world have seen substantial and marked shifts, adjustments and transformations in the domain, range and scope of her security imperatives. In

such a situation, India is bound to visualize a relatively wider and more comprehensive vision of National Security in the foreseeable future, without sacrificing the traditional approaches to the preservation and protection of her territorial integrity and national sovereignty from external aggression and, more importantly, relative freedom from any kind of harmful threats and challenges emanating from external or internal sources, or a combination of the two. In the newer sense, the conception of security is being enlarged to encompass military as well as non-military, and conventional as well as non-conventional threats and challenges to the state and society. Security is increasingly being revamped as security of the people, not just territory; security through development, not arms, security of all peoples everywhere, in their homes, on their jobs; in their streets, in their communities, and in their environment.

1.2. Challenges facing india

There has been a sea change in the perception of what constitutes "national space." Issues such as economics, media, and science that were for some time considered removed from the realm of intelligence targeting are now indivisible parts of it. Concepts such as economic warfare, cyber warfare and media offensive have served to increase intelligence targeting needs. The nature of organized crime has changed and its infiltration into society is growing. The merger of the local crime syndicates with narcotics distributors and arms smugglers has increased their destabilizing influence on society. Increased nuclear and missile technology proliferation in India's hostile neighborhood have imposed more demanding requirements on all three aspect's of intelligence targeting. The need in this case to provide accurate and actionable intelligence assessments regarding these threats is paramount.

India faces substantial threats and challenges, especially following the post *Kargil* (1999 Indo-Pak conflict) politico-strategic developments, the 1998 nuclear explosions by India and Pakistan, and other deleterious trends in South Asia. The changed environment clearly places great strain on the intelligence services: deteriorating security scenarios, including cross-border terrorism, drug traffic, diffusion of small arms, money laundering; illegal migrations across borders, refugee influx, challenges for food, energy and environmental security; human rights issues and national security requirements; growing insecurity stemming from "rising expectations" of the people, globally oriented

transformations of society, culture and economy; and inimical postures of cyber terrorism, etc.

1.3. Challenges to national security

While food, water and energy security, and maintenance of territorial integrity, along with safeguarding India's secular, democratic way of life readily come to mind, an overarching framework of India's national security has to take cognizance of military and non-military dimensions in terms of both external threats and internal challenges to its territorial integrity and national unity. Threats to a nation emanate as much from external aggression as from internal strife, but at times internal factors can erode national security more critically than any external danger.

National power based on political stability, societal cohesion and economic development would thus remain central to the future of India's national security. As mentioned in the introduction above, India today faces every kind of conceivable threat ranging from sub-conventional to conventional to nuclear, in addition to massive natural disasters like floods, droughts, earthquakes, the tsunami of 2004, and industrial accidents like the Bhopal gas tragedy of 1984. Hence HA/DR (Humanitarian Assistance/Disaster Relief) has become a very important task not only within the subcontinent of India, but also in the neighboring Indian Ocean Region (IOR) nations, who face the same problems and have insufficient capabilities for HA/DR.

1.4. External threats

1.4.1. China

India considers recurring Sino-Indian border violations by China, and its supply of strategic cum conventional weapons to Pakistan, as potential threats to its security. Negotiations since the 1962 Sino-Indian border war have so far failed to resolve the conflicting border claims, and each side has improved its military and logistics capabilities in the disputed regions. Since the war, China has continued its occupation of the Aksai Chin area (Indian Territory), through which it has built a strategic highway linking Xizang (Tibet) and Xinjiang autonomous regions. China has also claimed the north eastern Indian state of Arunachal Pradesh, which it calls 'lower Tibet'. In 2011, the Chinese violated

the 4000 km LAC (Line of Actual Control) 181 times. In 2012, the number of land violations exceeded 400.

China continues its drive towards accelerated development and modernisation. The thrust of the Chinese drive remains two pronged: rapid economic development and defence modernisation. China's efforts to increase its influence in the region along with enhanced maritime activities are evident. China's "String of Pearls" is not merely a naval or military strategy; neither is it just a regional strategy. It can be seen as a manifestation of China's ambition to attain global power status and secure a self-determined future. An examination and analysis of Chinese policy towards the South Asian region in general, and India in particular, shows that China has been making in-roads into India's neighbourhood by forging ties with countries in the sub-continent, South East Asia, the Middle East and Africa. There is also a view that this geopolitical strategy has evolved because of increasing Chinese dependence on imported energy and the need for securing routes for its energy supplies and maritime trade. China is presently focussed on its territorial claims in the APR, but is expected to become increasingly active in the IOR by 2030. It has a "No First Use doctrine against Non Nuclear Powers", and has two nuclear armed proxies (North Korea and Pakistan), who keep tensions boiling in the APR and IOR respectively.

1.4.2. Pakistan

Whilst dealing with its own internal turmoil, Pakistan has simultaneously continued to enhance and upgrade its conventional and strategic capability. The presence of terrorist infrastructure remains a security concern. Pakistan and India have been involved in four wars since their independence over the issue of Kashmir. Other than ideology and Kashmir, the other main sources of friction between Pakistan and India are the distribution of river water, disputes over the *Siachen Glacier* and *Sir Creek* (the latter includes a maritime boundary also). The Pakistan backed separatist proxy war is still continuing today.

The Chinese funded and Chinese built *Gwadar* seaport, located just 360 miles from the strategic Gulf of Oman, can provide China a naval base to disrupt global oil trade while protecting its own energy flow, by a land pipeline from *Gwadar* to China via the *Karrokaram Pass*. Pakistan has a First Use Nuclear Weapons policy, has been developing Tactical Nuclear weapons (TNWs) since

2011, and has the fastest growing nuclear-arsenal in the world, with an estimated 110 weapons.

1.4.3. Sri Lanka

In the post-LTTE era, security concerns of India and Sri Lanka have taken an entirely different form. India's perceptions of threat have grown as China has become more active in Sri Lanka. China's politico-economic initiatives and unrestrained supply of military equipment to Sri Lanka indicate that economic and strategic interests are behind China's specific interests in Sri Lanka.

In May 2007, China and Sri Lanka signed the "establishment of a friendship city relationship" relating to the *Hambantota* district for development of infrastructure, designated as the *Hambantota* Development Zone (HDZ). It is felt that China would be able to establish electronic systems and networks for monitoring Indian Ocean military and civilian traffic, electronic transmissions from the US base at Diego Garcia as well as Indian establishments in the Bay of Bengal. The Chinese built *Hambantota* Seaport and nearby international cargo airport can provide the Chinese Navy and Air Force with a military base in the IOR, just a few miles from India.

1.4.4. Bangladesh

The first and most serious issue is demographic. Over 25 million illegal Bangladeshi migrants have caused enormous tensions in the north east. Even today, despite fencing, the border is difficult to seal off completely due to numerous tributaries and waterways. The second is the continuous threat of destabilization it holds out to India in abetting and aiding more than a dozen Northeast Indian insurgent groups. The third is the support it gives to Islamic fundamentalist groups in infiltrating them into India with arms and explosives for subversion. The continuous flow of people from Bangladesh into India is the main threat.

This flow is for economic reasons as far as the Bengali Muslims are concerned. Besides this there is also a continuous flow of Bengali Hindus and Buddhists into India. This is because of state sponsored acts of terrorism against the minority populations. Today, India faces the triple threat of continuous demographic assault; assistance and shelter to more than a dozen insurgent groups from the Northeast, and the launching of fundamentalist militants from

Pakistan through Bangladesh.

1.4.5. Bhutan, Nepal and Myanmar

Relations with Bhutan, Nepal and Myanmar (SAARC members) have been marked by mutual understanding, though the Maoist (communist) takeover in Nepal has caused some problems for India.

The Bhutanese Royal Army has suffered casualties on India's behalf in the past when Bhutan took military action (Operation All Clear) to clear armed anti-Indian insurgents from its southern districts where they had taken forced sanctuary and established camps. India has also expressed readiness to re-negotiate its friendship treaty with Nepal as sought from time to time, most vehemently by the Maoists.

Relations between India and Myanmar went into a state of limbo in 1962, after General Ne Win seized power and ousted all Indians from that country while confiscating their businesses and properties. Despite a visit to India by General Ne Win, matters went from bad to worse when he sided with China during the Sino-Indian conflict. China saw in Myanmar a golden opportunity of immense strategic importance. Yangon allowed China to abut Thailand and India, gain access to the Bay of Bengal, and also develop a short route to the seas to and from its western districts like Sinkiang, Tibet, and Chengdu.

The Advantages that China gained through befriending Myanmar during its period of isolation have been widely analyzed and documented. The net affect was that Myanmar became almost a satellite of China and thus a threat to Indian security by allowing a Chinese military presence in various parts of Myanmar, access to many of its ports, and not the least, a significant electronic listening post on *the Great Cocos Islands* in the Bay of Bengal. The growing geostrategic importance of Myanmar has already created a regional power struggle between China and India to counter-balance each other's influence over Yangon. In recent times, India-Myanmar relations have shown a marked improvement.

1.5. Internal security threats

Indian society is made up of diverse ethnic groups, cultures, languages and religious denominations. This is both a strength and challenge. Although India's national integrity remains fundamentally secure, pressures from poverty, communalism and religious diversity throw up various challenges from time to

time. Insurgencies and communal clashes do take place, and the only antidote is poverty alleviation. It is hoped that by 2030, India's poverty levels will be reduced to below 5 percent.

2. Options for Strengthening Strategic Management: Processes of the Indian Military

2.1. Creation of a Higher Defence Management Organisation

The military is accepted as an important instrument of policy. In a democratic form of governance, the civilian leadership, who are the elected representatives of the people of the nation, are the policy makers and thus control the functioning of the military. The Higher Defence Management (HDM) functions are comprised partly of political decisions and partly operational matters. The art, science and practice of HDM is thus the interaction between the political and military elements of a nation. The organisation of HDM comprises the apparatus for formulation of defence policy and decision-making pertaining to national security. It is also concerned with the relationship between the political and military spheres. The philosophy and concept of higher defence control and management define the nature of institutions and procedures which the strategic leadership of a nation state would prefer to have to effectively address nation's security concerns, aspirations and perceived threats.

In the late sixties, two committees on Defence reviewed the Higher Defence Organisation, and made recommendations for an integrated MOD with the Service HQ and also supported the concept of a CDS. It was opined that "the principle of civilian control over the Defence machinery should not be interpreted to mean bureaucratic or civil service control but essentially ultimate political control by the Parliament and the cabinet." However such recommendations were not accepted by the GOI.

In November 1998, a National Security Council (NSC) was established with a Strategic Policy Group (SPG) and a National Security Advisory Board (NSAB) consisting of eminent experts from various fields. Among other things, it was expected to conduct a 'Strategic Defence Review' (SDR) which would be an all encompassing document concerning all aspects of security. The SDR was to be dynamically reviewed to offer continuous strategic security guidance as it also lay down the foundations for the management of defence.

The nuclear explosions in May 1998 had again brought to fore the need for evolving command and control structures for strategic forces, and thus an urgent requirement for restructuring our higher defence organisations. The *Kargil* Review Committee (KRC), formed in the aftermath of the *Kargil War* of 1999 had observed, "The political, bureaucratic, military and intelligence establishments appear to have developed a vested interest in the status quo. National security management recedes into the background in times of peace and is considered too delicate to be tampered with in times of war. The continuing proxy war and the prevailing nuclearized security environment justify a thorough review of the national system in its entirety."

Various constituents of the HDM are explained as follows:

(a) The Cabinet Committee on Security (CCS).

The CCS is the apex body in India responsible for the management of security. It is chaired by the Prime Minister and comprises the Foreign Minister, the Home Minister, the Finance Minister and the Defence Minister. The CCS is constituted by elected members of the parliament and therefore has the mandate to take decisions on security matters on behalf of all of the citizens of India. The erstwhile Cabinet Committee on Political Affairs (CCPA) was modified into the CCS so as to reduce the members so that decision making could be speeded up and the requisite members could be assembled in time during an emergency.

The CCS is responsible for creating the vision for the nation, identification and prioritization of national interests, and it conducts the overall security appraisal for the country. The CCS takes all national level decisions concerning security. Unfortunately in this era of coalition politics, the CCS does not meet often enough, since the key concerned ministers are involved with domestic politics, and generally unavailable.

(b) The National Security Council (NSC)

The NSC is the advisory body to the CCS and provides it with secretarial support (provided by the NSC Secretariat). The NSC is headed by the NSA (National Security Advisor) whose function is described in the next sub paragraph. The NSC is a three-tiered body comprised of: the NSA; the Strategic Policy Group (SPG) which comprises the various Secretaries in the Government, Chiefs of the Armed Forces, the Chiefs of Intelligence Agencies; scientists from various fields including the nuclear field, finance specialists etc.; and the National Security Advisory Board (NSAB) which is described in a subsequent sub-paragraph

below.

The aim of the NSC is to analyse the military, political and economic threats to the nation. The council undertakes formulation and periodic review of India's Strategic Defence Review (SDR). Accordingly, its accountability remains to the government of the day and not to the Parliament or the nation. Its functioning and effectiveness too remain purely dependent upon executive dictates and the seriousness of the government. The NSC does meet regularly.

(c) National Security Advisor (NSA)

The NSA (equivalent of a Cabinet Minister) is a special appointee from any field – political, bureaucracy, armed forces or strategic think tanks, made by the PM. All inputs to the Apex Body and the CCS are channelled through the NSA. The NSA has a pivotal role to play in the effectiveness of the NSC.

(d) National Security Advisory Board (Experts Committee)

The NSAB is purely an executive entity without any direct dealing with Parliament. Eminent persons from the Govt, senior retired military officers, retired diplomats, experts in external security, strategic analysis, foreign affairs, defence, internal security, science, technology and economics form this board. The NSAB meets twice a week.

2.2. Formalisation of the concept of the CDS

The higher direction of defence and its policy formulation are strictly the prerogative of the political leadership, as it should be in a democratic setup, there being full political control over the armed forces. This fundamental principle has been scrupulously followed by our apolitical armed forces, unlike the examples of Pakistan and Bangladesh in our neighbourhood.

It has been said that while too little control over the armed forces can lead to serious problems, too much control can also smother the military and make them ineffective in the long run. The formulation of the CDS in India aims to strike a careful balance. There is an ongoing debate over the advantages/disadvantages of bringing the three services under one head, Chief of Defence Staff, so as to bring the Armed Forces under a unified command and to have one chief dealing with the MOD in place of the Chiefs of Staff Committee/ Individual Service Chief. This effort was to overcome the flaws in the higher direction of war. The formation of the CDS in India has been accepted in principle by the government based on the Group of Ministers report after the 1999 India-Pakistan

Kargil conflict.

The concept of CDS, variations of which are obtained in the US, UK, France and other countries, is perceived to serve two important functions as follows: first, to provide single-point military advice to the political leadership, and second, to achieve a far more effective coordination between the three services. The CDS would support the functioning of Govt in the following ways:

(a) Complex security requirements

The complexities of modern security requirements, as indicated in the 1999 Indo-Pak *Kargil* conflict, demand well deliberated judgments and single point military advice to the government on the full range of issues of higher defence management and higher direction of war—the grand strategy, desired military capabilities, force structuring, modernisation plans, technological upgrade, defence spending and so on. The CDS heading the COSC, with a status above the Service Chiefs, is expected to examine issues in the overall perspective, consider options, identify inter-service priorities, present the case and the military advice to the government, and thus participate in the decision-making.

(b) Integration of resources

The crucial requirement of integrating is equally effectively achieved through joint planning and joint conduct of operations. Interfacing mechanisms at the strategic, operational and tactical levels would need to be improved to near real time dimensions. Development of synergised tri-service combat power can be greatly improved through exploitation of the dramatic potential of C4I systems, information warfare, and revolution in military affairs (RMA) technologies to the extent these can be inducted.

2.3. Creation of an Integrated Defence Staff

Since all attempts to set up a CDS failed, possibly due to lack of consensus amongst the political parties, as an interim first step, in Nov 2001 the President sanctioned the creation of the Integrated Defence Staff. The Chief of Integrated Defence Staff to Chairman COSC ("CISC" - a 3-star officer from the Army/Navy/Air Force, in rotation) was constituted from the Chief of Integrated Defence Staff (CIDS) which was functioning as an ad-hoc body pending the appointment of the CDS. The concept of COSC has been retained and the proposed Vice Chief of Defence Staff (VCDS) has been designated as the CISC. The CISC supports the Chairman COSC in the optimal performance of their

roles and functions.

2.4. Indian Nuclear Command Authority

On January 4, 2003, the Nuclear Command Authority (NCA) was constituted. It comprises a Political Council and an Executive Council. The Executive Council, chaired by the National Security Advisor (NSA) gives inputs to the Political Council (chaired by the Prime Minister) which authorises a nuclear attack when deemed necessary. This order is conveyed for execution to the Strategic Forces Command (SFC), through the Executive Council. The SFC is commanded by a 3-star Commander in Chief, from the Army, Navy or Air Force.

The nuclear weapons are kept in a de-alerted and de-mated state with the weapons, trigger mechanisms and delivery systems kept separately. This along with the NCA system, ensures that an accidental launch of nuclear weapons is impossible.

2.5. National decision making – civil military structure in other countries

The study of the American and the UK experience in unification of the Armed Forces and the synergistic management of defence gives an insight of the problems and some likely solutions. In the post-World War II era, there has been a general trend all over the world towards integration of the armed forces and integration of Services HQ with the Defence Ministry/Defence Department.

For the unification of the US Armed Forces, the Goldwater Nichols Act of 1986 was enacted with the following objectives of reorganizing the Department of Defence (DOD) (equivalent of India's MOD) : i) to strengthen civilian authority within the Department; ii) to improve the military advice provided to the President, the NSC and the Secretary of Defence (equivalent of India's Defence Minister), placing clear responsibility on the commanders of the unified and specified combatant commands for the accomplishment of missions assigned to those commands; iii) to increase attention to the formulation of strategy and contingency planning; iv) to provide for more efficient use of defence resources; v) to improve joint officer management policies; vi) to enhance otherwise the effectiveness of military operations; and vii) to improve the management and administration of the DOD. The models of other countries are briefly explained as follows:

2.5.1. USA

The central feature of the US Constitution in respect to the Nation's Armed Forces is the establishment of civilian control over the military. The President of the USA is the Commander-in-Chief of the US Armed Forces, and his principal assistant for the military establishment is the Secretary of Defence (the counterpart of our Defence Minister). Anyone who has in the previous ten years served in the Armed Forces is ineligible for appointment as Secretary of Defence. A National Security Council advises the President on integration of domestic, foreign and military policies relating to national security. This Council consists of the President, the Vice President, the Secretary of State, the Secretary of Defence, and the Director of Emergency Planning. Other Secretaries (equivalent of our Ministers) can be appointed to the Council as desired by the President. The Joint Chiefs of Staff are the principal military advisers to the President, the National Security Council and the Secretary of Defence.

2.5.2. United Kingdom

In the UK, the Ministry of Defence is a unified and integrated organisation which functions both as a department of the Government and a military headquarters. Civil officials and sService personnel work side by side with neither predominating nor interfering in each other's spheres. Decisions on issues affecting the functioning of both are taken jointly by them.

There are four elements: military, scientific, procurement executive and civil secretariat functioning in the Ministry of Defence. Each of them comes directly under the Secretary of State for Defence. In all Ministries in the UK except the Ministry of Defence, the senior civil servant of the Ministry is known as the Permanent Under Secretary, and is the principal adviser on all matters affecting his Ministry. In the Ministry of Defence, the Permanent Under Secretary is one of the four advisers advising only on points affecting his sphere of activity and not on all aspects pertaining to the functioning of the Ministry. The other three advisers are the Chief of the Defence Staff, Chief Scientific Adviser and Chief Executive (Defence Executive). To ensure conjoint working, all elements in the Ministry of Defence at different levels work in inter related and inter-locking committees. The collective authorities of these Committees are at the core of all important business in the Ministry of Defence.

In the UK, supreme responsibility for national defence rests with the

Cabinet, which is collectively responsible to the Parliament. A sub-committee of the Cabinet known as the Defence and Overseas Policy Committee is chaired by the Prime Minister, with certain selected Ministers as members. It deals with all important issues connected with Defence. Chief of Defence Staff is invited to be in attendance during all deliberations of this Committee.

2.5.3. China

The Chairman of the CCP (Chinese Communist Party) is the highest authority in the country. The CMC (Central Military Commission) of the Party acting under the Chairman is the highest decision making body concerning the Armed Forces. The Defence Minister and the Chief of the General Staff are the secretaries of the Commission. The Ministry of Defence exercises only administrative control and orders to the Services are issued directly by the Military Affairs Commission. The Peoples Liberation Army General Headquarters is in command of the three Services. The four departments of this Headquarters are the General Staff Department under the Chief of General Staff, the General Logistics Department under the Chief of General Logistics Department, the General Political Department under the Chief of the General Political Department, and the General Armaments Department under the Chief of the General Armaments Department. The General Political Department maintains close touch with the Central Committee of the Party, and supervises the political education of the Armed Forces. Executive orders on all military matters to the services are issued by the Chief of the General Staff on behalf of the CMC. The Chief of the General Political Department issues executive orders on political and ideological issues. Civil officials are attached to the Ministry of Defence in the capacity of financial, economic and scientific advisers. The Second Artillery Corps (founded in 1967) and also known as "SAC," or "Strategic Rocket Forces," was described in 2007 by President Hu Jintao as a "strategic force directly commanded and used by the Party Central Committee and the Central Military Commission, and is our core force for strategic deterrence." The SAC is not a part of the PLA Army, Navy or Air Force.

2.5.4. Pakistan

In 1976 Pakistan carried out a major re-organisation of its defence High Command. The Prime Minister exercised personal and effective control over the

functioning of the three Services. He was also the Defence Minister and presided over the Defence Committee of the Cabinet consisting of certain selected Cabinet Ministers. Chairman Joint Chiefs of Staff and Service Chiefs were in attendance at this Committee. The policy changed during the later part of the seventies when the functions of the Prime Minister were carried out by the Chief Martial Law Administrator who was also the Chief of the Army Staff.

Working under the Defence Committee was the Defence Council, consisting again of the Prime Minister as the Chairman. Members of this Council were the Finance Minister, Minister of State for Defence and Foreign Affairs, Chairman of the Joint Chiefs of Staff, Service Chiefs, Secretary General of Defence, Foreign Secretary, Finance Secretary and Defence Secretary. The Secretary General of Defence coordinates the functioning of the Ministry of Defence which comprises the Defence Division, Defence Production Division, Aviation Division, Joint Chiefs of Staff Committee and the three Services Headquarters. The Joint Chiefs of Staff Committee consists of a Chairman, three Service Chiefs and the Secretary of the Defence Division.

In peace time the Chairman of the Joint Chiefs of Staff is to coordinate defence plans but cannot interfere with nor give any executive directions to the Services. During war, the Prime Minister is to supervise the conduct of the national war efforts and the Chairman of the Joint Chiefs of Staff Committee is to function as his Principal Staff Officer, taking decisions and issuing directives, as authorised. Pakistan's Strategic Command Organization (SCO) comprises the followings:

(a) National Command Authority (NCA)

The NCA (announced on 2 February 2000) is the chief decision making body, under the chairmanship of the President, with the Prime Minister being the Vice Chairman. It is responsible for policy formulation and the development and employment of strategic systems. It functions through two committees, viz. the Employment Control Committee and the Development Control Committee.

(b) Strategic Plans Division (SPD)

The SPD provides secretariat support to the NCA. It is headed by a General and comprises officers from the three services. The SPD functions directly under the President, Prime Mister and Chairman of the Joint Chiefs of Staff Committee.

(c) Strategic Forces Command (SFC)

Separate SFCs are in place in the Army, Navy and Air Force.

2.6. Creation of a strong homeland security apparatus

Homeland Security encompasses several dimensions of national focus and relates to safeguarding the internal environment of the country from disruptive activities that can potentially lead to disorder, loss of citizens' lives and destruction of public and private property. India's Homeland Security agencies primarily consist of the paramilitary forces, State and central police forces and the intelligence agencies, all under the aegis of the Indian Ministry of Home Affairs.

Homeland Security consists of all activities aimed at preparing for and protecting the country against risks, and Homeland Security in India is handled by a multitude of bodies with complex functional and reporting relationships. Law and order is a State subject and the State police are responsible for maintaining law and order internally. The Ministry of Home Affairs is responsible for internal security, management of paramilitary forces, border management, Centre-State relations, administration of Union Territories and disaster management.

The Ministry of Home Affairs has identified seven main sectors as priority areas which need specific focus to strengthen the Homeland Security of the country. These include border infiltration, counter terrorism, critical infrastructure protection, maritime and coastal security, safe city surveillance, intelligence & cyber crime as well as police and paramilitary modernisation.

2.7. Promulgation of an Indian National Security Strategy document

The Indian National Security Council (NSC) has been in existence since 1999. Yet, the government has not put out an official document outlining a National Security Strategy for India. This is despite the fact that India faces numerous formidable challenges to its national security. The earlier attempts to set up the NSC, notably in 1990, proved short-lived. Why is it that India could not set up a NSC earlier and why is it that India does not have a well articulated National Security Strategy document? The leaders make statements on national security inside and outside of Parliament quite regularly, but the government hesitates in spelling out a national security strategy. Two main reasons for this could be the following:

1) First, there is no political consensus in the country on national security issues. For instance, there is no consensus on how to treat challenges from

Pakistan and China. The government's policies on these issues have fluctuated. To give another example, there is little agreement on how to deal with the Maoist (*Naxal*) threat which is prevalent in about 30 percent of India – this "Red Corridor" stretches from Bengal to south west India. Similarly, the views of political parties on Kashmir and insurgencies in the North East differ widely. In the aftermath of the Mumbai terror attacks (26 November 2008) there was acute debate on how India should have responded to the attacks. The government used restraint. Many appreciated the restraint while others saw the government's response as weak. Even today, there is no clarity on how the government will deal with such terror attacks in the future.

2) Secondly, the government has not been able to address the crucial issue of the coordination required to formulate and address the issues of national security, despite the setting up of the NSC.

India urgently needs a National Security Strategy, to cope with growing and unpredictable global and regional security challenges.

2.8. Constraints of the Indian Nuclear Doctrine

The nuclear doctrine of India 'outlines the broad principles for the development, deployment and employment of India's nuclear forces,' While the unclassified version is brief, this in all probability is backed by a more detailed classified document for discussion and comment within the security establishment. Some aspects are nevertheless relevant from the point of view of an open debate. These are as follows:

(a) No first use

The most crucial of all decisions viz. the policy of 'no first use' was announced soon after the *Pokhran* II tests (1998). Little has been written on the security imperatives that led to this decision. Having made this decision, the nation is committed to a reactive nuclear policy, that of having to absorb a nuclear strike before being able to react with nuclear weapons.

For India, the benefits of this policy could only be two. The first is diplomatic in that it announces to the world the purely defensive nature of the country's nuclear posture and its commitment not to be the first to engage in the use of such weapons. The second is military in terms of attempting to raise the threshold of a nuclear exchange in times of crises.

(b) Credible minimum nuclear deterrence

The doctrine states that 'India shall pursue a doctrine of credible minimum nuclear deterrence.' A doctrine of deterrence is based on the premise that one's capability to retaliate is adequate enough for the adversary to conclude that a first strike by him will invite retaliation that would cause unacceptable damage. Hence the adversary will refrain from taking the first strike step.

Deterrence means that the adversary's thought process is analytical in that he will take into account India's ability to absorb a first strike and respond, assess the damage of this response, superimpose it on his own aims and objectives and then make a value judgement on whether the risks of a first strike are worth taking or not in the first place.

(c) Peacetime posture.

The doctrine states that India's peacetime posture aims at convincing any potential aggressor that any nuclear attack on India and its forces shall result in punitive retaliation with nuclear weapons to inflict damage unacceptable to the aggressor. Again, for this logic of deterrence to work, the potential aggressor would have to be aware of the quality, extent and targets of India's retaliation.

(d) Nuclear forces

Once the policy of absorbing a first strike has been established, it naturally follows that India's nuclear forces must have a guaranteed degree of survivability to retaliate. For delivery systems the triad principle is what the Superpowers have followed, and it is this that India's doctrine proposes. It is revealing to hear what Stephen I. Schwartz has to say in his study. Quote. "But the triad as we know it was not the result of any sort of systematic plan. It simply evolved as the Air Force and the Navy (the Army was effectively prevented from competing in the strategic arena) built weapons in no small measure to deny the budgetary advantage to each other. As former Secretary of Defense James Schlesinger said almost a quarter century ago, the rationale for the triad is "just a rationalization."

India will need to evolve unique models flowing from the national security policy and keeping the nation's affordability criteria in mind. Planning for worst case scenarios is not an affordable option even for conventional warfare leave alone nuclear forces. The most glaring weakness of the doctrine appears to be its idealism in the face of obvious national limitations. This one weakness may make the entire exercise entirely theoretical.

(e) Command and control

The higher defence organization as currently existing in India is perhaps unique

for a democracy. The three Service HQs are not a part of the Ministry of Defence, but outside of it. The Service Chiefs do not exercise the powers of a Secretary to the Government. This vests all powers relating to finance, procurement, promotion and postings of senior officers with the MOD. Yet operational accountability rests with the Service Chiefs. Operationally, there is no Combined Defence Staff concept to jointly plan for and execute operations. The requirements of the doctrine of 'unity of command and control of nuclear forces, of an integrated operational plan and of an effective and survivable command and control system with requisite flexibility and responsiveness' will sound hollow unless the existing weaknesses in the higher defence organization are first rectified.

(f) Affordability

An essential input to security planning relates to the criteria of affordability. Devoid of this, doctrines and planning lose their meaning.

2.9. Border management

The management of India's borders presents many challenges requiring coordinated and concerted action by administrative, diplomatic, security, intelligence, legal, regulatory and economic agencies of the country to secure the frontiers and serve the nation's best interests. The India-Pakistan border has varied terrain and distinct geographical features. It is characterised by attempts at infiltration by terrorists and smuggling of arms, ammunition and contraband, the Line of Control being the most active and live portion of the border. It has now been fenced and floodlit by India, except for some gaps in riverine areas, as part of the strategy to check anti-national activities across the Indo-Pakistan border. The India-Bangladesh border is partially fenced.

2.10. Inculcating and developing a strategic culture

There are different views prevalent on the subject of Indian strategic culture. The more widely held global view is that it is either "non-existent" or "slowly evolving." We often hear statements alleging that India lacks a strategic culture. The most cogent expression of this idea was by George Tanham, a senior defence analyst at Rand Corporation in the early nineties. According to his analysis, it is impossible for a civilisation and state like India not to have a strategic culture. It is like someone claiming to be apolitical, which itself is a political choice. Many

others see in India a strategic culture that is "more distinct and coherent than that of most contemporary nation states.," according to Rodney W. Jones.

A strategic culture is that set of shared beliefs, assumptions and modes of behaviour derived from common experience and accepted narratives (both oral and written), that shape collective identity and relationships to other groups, and which determine appropriate ends and means for achieving security objectives, namely an identifiable set of basic assumptions about the nature of international and military issues. This would involve both a central strategic paradigm (about the role of war in human affairs, the efficacy of force, the nature of the adversary, and so on), and a grand strategy or secondary assumptions about operational policies that flow from the assumptions.

The elements of Indian strategic culture are evident in what is common to all three streams, *Nehruvians*, neoliberals and hyperrealists. It is this common strategic culture that we have inherited, first clearly expressed and adapted for modern times by Prime Minister Jawaharlal Nehru, which explains the substantial agreement on values, on goals and even on means in our foreign policy, despite marked and rapid changes in the external environment in which we have operated. This is why the core traits of our foreign policies have persisted since independence, irrespective of the parties in power.

Our goals have stayed constant, even as the means available for us have increased, and as the world around us has become more complex and more linked to our own development. If India is to deal with the issues of the new twenty-first century world, it is essential that we further elaborate our own culture and tradition of strategic thought. So long as India's situation and needs are unique, we must encourage our own ways of looking at developments, and develop our own strategic culture, vocabulary and doctrine.

3. National Initiatives toward Effective Strategic Management of Indian Armed Forces

3.1. Indian ocean naval symposium

An initiative of the Indian Navy, the 'Indian Ocean Naval Symposium' (IONS) is a voluntary initiative that seeks to increase maritime co-operation among navies of the littoral states of the Indian Ocean Region by providing an open and inclusive forum for discussion of regionally relevant maritime issues. The first

IONS was held in New Delhi in 2008, then in Abu Dhabi in 2010, and in 2012 it was held in South Africa. The next meeting is scheduled for Canberra (Australia) in 2014.

In the process, it endeavors to generate a flow of information between naval professionals that would lead to common understanding and possible cooperative solutions on the way ahead. The IONS is a maritime security construct along similar lines to the WPNS. Whilst the WPNS is for the region of Asia-Pacific, the IONS addresses the IOR. The Principal Objectives for the IONS Construct are as follows:

1) To promote a shared understanding of the maritime issues facing the littoral nation-states of the Indian Ocean and the formulation of a common set of strategies designed to enhance regional maritime security;

2) To strengthen the capability of all littoral nation-states of the Indian Ocean to address present and anticipated challenges to maritime security and stability;

3) To establish and promote a variety of trans-national, maritime, cooperative mechanisms designed to mitigate maritime-security concerns within the Indian Ocean;

4) To develop interoperability in terms of doctrines, procedures, organisational and logistic systems and operational processes, so as to promote the development of regional naval capacities for speedy, responsive and effective Humanitarian Assistance and Disaster Relief (HA / DR) throughout the Indian Ocean region.

3.2. Anti-piracy operations

Piracy off the coast of Somalia has grown steadily over the years. A large percentage of India's trade, including oil and fertilizers, passes through the Gulf of Aden. The ministry of shipping has estimated that Indian imports and exports through the Gulf of Aden route were valued at several billion dollars. The safety and unhindered continuity of maritime trade, through ships that transit through this route, is a primary national concern, as it directly impacts our economy.

About 20 to 24 Indian flagged merchant ships transit the Gulf of Aden every month. Although this accounts for only 13% of our trade (the remainder is carried in foreign 'bottoms'), the crew of the majority of foreign flagged vessels comprise Indian nationals, as India's large seafaring community accounts for

nearly 7% of the world's seafarers. Consequently, to protect Indian ships and Indian citizens employed in seafaring duties, the Indian Navy commenced Anti-Piracy patrols in the Gulf of Aden from October 23, 2008. In addition to escorting Indian flagged ships, ships of other countries have also been escorted. Merchant ships are currently being escorted along the entire length of the 490 nautical miles (nm) long and 20 nm wide Internationally Recommended Transit Corridor (IRTC) that has been promulgated for use by all merchant vessels.

During its deployments for Anti-Piracy operations, the Indian Naval ships have prevented numerous piracy attempts on merchant vessels. In addition, the Indian Navy and Indian Coast Guard, in 2010–2011, conducted combined anti-piracy operations within 400 nm of India's west coast, and wiped out the threat of Somalian pirates operating there, by sinking or capturing their pirate mother ships. Presently over 160 captured Somalian pirates are facing trial in Mumbai, while the Arabian Sea within 600 nm off India's west coast is "pirate free." Non-security positive spin-offs of this initiative by the Indian Navy are as follows:

(a) Cooperation on anti-piracy operations - exchange of information

Although a number of naval ships from various countries are being employed in the area for counter piracy missions, there initially had been very limited exchange of piracy related information between them. To facilitate sharing of information, a Counter Piracy "Shared Awareness and De-confliction (SHADE)" mechanism was initiated, so that the forces deployed for these operations could exchange piracy related unclassified information through the web-based MERCURY Net. SHADE meetings are held at Bahrain and offer the Indian Navy an opportunity to interact with representatives from other navies and remain apprised of the latest initiatives being taken to avoid piracy in the Gulf of Aden. An operational update is also provided by various multinational forces and representatives from the merchant shipping community.

(b) New registration by merchant ships for escort by indian navy ships

The Director General, Shipping has recently launched a web-based registration service (www.dgshipping.com) where merchant ships can register with DG Shipping in order to avail of an Anti-Piracy escort by Indian Navy ships in the Gulf of Aden. Using this service, the users can access the Anti-Piracy escort schedule of the Indian Navy and then request their inclusion in a particular escort cycle.

3.3. Indian membership in the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP), and the ReCAAP Information Sharing Centre (ISC) at Singapore

The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) is the first regional government-to-government agreement to promote and enhance cooperation against piracy and armed robbery in Asia. It was finalised on 11 November 2004 and entered into force on 4 September 2006. To date, 18 States have become Contracting Parties to ReCAAP. The ReCAAP Information Sharing Centre (ReCAAP ISC) was established under the Agreement, and was officially launched in Singapore on 29 November 2006. It was formally recognised as an international organisation on 30 January 2007. ReCAAP is basically an organisation of Coast Guards of the 18 member nations. The roles of the ReCAAP ISC are as follows:

1) To serve as a platform for information exchange with the ReCAAP Focal Points via the Information Network System (IFN); facilitate communications and information exchange among participating governments to improve incident response by member countries; analyse and provide accurate statistics of the piracy and armed robbery incidents to foster better understanding of the situation in Asia;

2) To facilitate capacity building efforts that help improve the capability of member countries in combating piracy and armed robbery in the region;

3) To cooperate with organisations and like-minded parties on joint exercises, information sharing, capacity building programmes, or other forms of cooperation, as appropriate, and agreed upon among the Contracting Parties.

The ReCAAP ISC (Singapore) facilitates exchange of information among the ReCAAP Focal Points through a secure web-based Information Network System (IFN). Through this network, the ReCAAP Focal Points are linked to each other as well as to the ReCAAP ISC on a 24/7 basis, and are able to facilitate appropriate responses to incidents. The Indian Coast Guard has been designated by the GOI as the nodal Indian agency which represents India at ReCAAP.

3.4. Army modernisation plans

The Indian Army is presently raising two mountain divisions for its north eastern border with China, and is expected to raise another "Mountain Strike Corps" comprising two more mountain divisions for the same border – this total force

increase of about 100,000 troops is expected to be completed by 2017. The CCS has stressed the need to enhance the Army's air lift capabilities in the north eastern sector bordering China. The Army has furthermore requested an increase in stocks of ammunition, of tanks and artillery guns, the raising of additional Unmanned Aerial Vehicle (UAV) squadrons and improvement to the reconnaissance and surveillance capabilities of the armed forces. The Ministry of Defence and the Army have seriously got down to the table to discuss the China threat which is very much real, and how best to counter it with their own strategies. The Army expects to have a dedicated communications satellite by 2015-16.

3.5. Creation of an Indian National Defence University

India has long lacked a robust strategic thinking culture both within the military as well as outside it, as highlighted earlier. The government is now finally scrambling to establish the Indian National Defence University (**INDU**) to help craft strategic planning and analysis in keeping with the country's long term geopolitical objectives. The Union Cabinet has taken up the proposal to set up INDU as a fully-autonomous institution to be created by an Act of Parliament, decades after it was first mooted. Even the 2001 Group of Ministers report on ''Reforming the national security system'' had strongly recommended INDU's creation to usher in synergy between the academic world and the executive.

At present, university research on defence and strategic issues is neither structured effectively, nor does it have any policy orientation. Conversely, the US, China and several other countries have institutions like INDU to ensure cross-pollination of ideas and strategic thinking between academia and government. INDU's charter will be to undertake long-term defence and strategic studies, create ''synergy'' between academicians and government functionaries, and educate national security leaders on all aspects of national strategy. .Namely, INDU hopes to infuse governance with an appropriate strategic culture.

INDU will also promote coordination and interaction among the Army, Navy and IAF. It will promote policy oriented research on all aspects relating to national security as an input to strategic national policy making. It will encourage awareness of national security issues by reaching out to scholars and an audience beyond the official machinery. INDU will also educate national security leaders

on aspects of national security strategy, national military strategy, national information strategy and national technology strategy through teaching and research.

3.6. Modernisation of the IAF

The modernisation of the IAF has been put on the fast track. In the fast induction mode, the IAF in the coming years will induct state-of-the-art aircraft, including 75 Swiss *Pilatus* PC-7 basic trainers, French *Rafale* fourth generation fighter aircraft from 2015 onwards, and Indo-Russian T-50 stealth fifth generation fighter aircraft from 2017 onwards. The Air Force expects to increase its combat aircraft squadrons from the present 34 to 42 by 2022, though experts believe that India needs 56 fighter squadrons to deal with a simultaneous Pakistan–China threat. In addition C-5 *Galaxy* and C-130J transport aircraft are being inducted along with heavy lift helicopters and helicopter gunships. A dedicated communications satellite for the Air Force is planned for launch by 2013-14.

3.7. Indian Navy's modernisation and maritime security

Since 2002, India has undertaken a major naval modernization program, with the overall aim of upgrading its military within a 15-year timeframe. Numerically, the plan intends to make the Indian Navy the third-largest fleet in the world. It currently stands as the fifth-largest. In January 2011, India's Defense Ministry released the Defense Procurement Procedure 2011 (DPP-2011), which contains separate guidelines for government-owned and privately-owned shipyards to promote competition and increase the efficiency of indigenously-built ships. The centerpiece of the Indian Navy's modernization scheme revolves around the acquisition of aircraft carriers and nuclear-powered submarines.

The Russian built Akula class SSN, INS *Chakra*, entered *Vishakapatnam* Naval Base on 4 April 2012. Presently, India has allocated funds for the acquisition of three aircraft carriers. The first, INS *Vikramaditya* (formerly the Russian Navy's *Admiral Gorshkov*), will join the Navy soon from Russia. INS *Vikramaditya* (45,000 tons) will carry MiG-29K fighter aircraft and helicopters. India's other two aircraft carriers are being locally built — the first, INS *Vikrant* (40,000 tons), is due to enter service by 2017, and the second carrier (INS *Vishal*), expected to be 65,000 tons, is due in 2025. These aircraft carriers would essentially make India a true blue-water navy and consolidate its force projection

capability over a far greater portion of the IOR.

In July 2009 India launched the INS *Arihant*, its first indigenously-built SSBN, with the intention of commissioning it in late 2013. This will give India a nuclear triad (land and sea-based ballistic missiles and bombers carrying nuclear-tipped bombs/missiles), a capability currently only possessed by the United States, China and Russia. The *Arihant* SSBN will carry SLBMs. Three indigenously-built nuclear-powered submarines are planned for induction by 2020. The allocation of $11 billion for six diesel-electric submarines featuring improved land-attack capabilities has also recently been approved.

While aircraft carriers and submarines dominate the naval modernization program, there are other elements, including amphibious warfare ships (LPDs), stealth frigates, destroyers and mine hunters. At present the Navy has 46 ships and submarines on order in various shipyards (46 are being built in India), while another 49 are planned.

Post Mumbai terror attack of November 26, 2008, the Navy was also made responsible for coastal security. Hopefully, after 2020, the Indian Coast Guard, which has 160 ships, 12 hovercraft and 40 aircraft on order, will take over this role, and thus free the Navy for its traditional blue water roles in the IOR and APR.

Since India has over 300,000 fishing boats, a home built system of communications and distress alert is being given free of cost to the fishermen, who will also act as the "eyes and ears" of coastal security, by reporting any suspicious contacts or if they come under terror attack or are in distress. Further, for enhancing coastal surveillance capabilities, a Coastal Surveillance Network (CSN) along the coastline is being established. In the first phase, 46 such radar stations are being set up by the end of 2012, and 39 stations are planned under Phase-2, by 2013-14.

All coastal security activities (ranging from the coastline to 200 nm EEZ limit) are controlled and coordinated by the Navy which operates Joint Operations Centres (JOCs) from *Mumbai*, *Kochi*, *Vishakapatnam* and *Port Blair*. The JOCs have staff from the Navy, Coast Guard and other Maritime agencies. In addition the Coast Guard liaises with all other seagoing agencies (customs, marine police, fishermen etc) and is responsible to the Navy for ensuring security in the territorial waters, which extend to 12 nm from the coast line.

3.8. Naresh Chandra High Powered Committee Recommendations – 2012

This high powered Committee, headed by Mr. Naresh Chandra (former Cabinet Secretary, former Defense Secretary and former Ambassador to USA) was set up by the Government of India (GOI) in 2011 to re-examine India's strategic defense posture, which had been in limbo since a number of the 350 recommendations made in 2001 by the Group of Ministers (post *Kargil* conflict of 1999 with Pakistan) had not yet been implemented. The Naresh Chandra Committee comprised experts from the military, civil, diplomatic, nuclear, scientific and economic fields. Its salient recommendations to the GOI, made in mid-2012 are as follows:

1) Creation of a permanent 4 star Chairman COSC, to replace the existing temporary rotational system (where the senior most Chief of the Army, Navy or Air Force, carries out this duty in addition to his own).

2) Integration of Military headquarters with the Ministry of Defence, by greater cross postings of military and bureaucrats, to fill up various posts.

3) Better co-ordination between Intelligence Agencies.

4) Creation of a dedicated financial institution for access to energy, rare earths and raw materials from across the globe.

5) Creation of a Special Operations Command (SOC) based on the US structure, since asymmetrical threats are expected to be the main challenge to Indian national security in the coming decades.

6) Setting up of an Advanced Projects Agency (APA), along lines similar to DARPA of the USA and the 863 Program of China to undertake high risk futuristic military research.

7) Two independent officers to take charge of the appointments of Scientific Advisor to Defense Minister (SA to RM) and Director General of the Defense Research and Development Organization (DGDRDO). Presently, the same person carries out both these duties.

8) Setting up of a "Sub Group on Defense Technology" to ensure indigenous design capability and also for auditing the DRDO.

9) The Army be given management of the India-China border, and to retain control over all ground forces (including paramilitary, police and intelligence agencies) posted for border management cum defense duties.

Conclusion

India's national security aim is to ensure a conducive internal and external environment for unhindered economic progress and socio-political development for enabling India to assume its rightful role in the emerging world order. National interests and objectives and also political aims drive defense policies and strategies. India's defense and security policies play an important role in the country's national security management by addressing external and internal threats to core national values. Whether India should have alliances to meet the emerging threats or it should "go it alone" is a political decision which needs to be taken soon. The process of managing India's national security is still evolving, and hopefully all loopholes will be plugged in the near future.