Headquarters Integrated Defence Staff Ministry of Defence



JOINT DOCTRINE INDIAN ARMED FORCES

ILLUSTRATION

All photographs (unless otherwise specified) are collected from Headquarters Integrated Defence Staff records, unclassified military publications.

Compilation of Data: Inputs compiled from Indian National Constitution, Annual Reports of Ministry of Defence, various Defence publications, journals and military pamphlets, Service Headquarters, War Colleges, etc.

Comments to:



Directorate of Doctrine

Doctrine, Organisation and Training (DOT) Branch
Room No 55, South Hutments

Headquarters Integrated Defence Staff

Kashmir House, Rajaji Marg

New Delhi-110 011

Printing : 53 Printing Press, E-in-C's Branch, New Delhi-110 011

Type Setting and Design: Directorate of Doctrine & 53 Printing Section

New Delhi -110 011

Second Edition : April 2017

No parts of this book may be reproduced in any form by print, photo print, microfilm or any other means without written permission of the publisher.

Published by Directorate of Doctrine, Headquarters Integrated Defence Staff



CHAIRMAN CHIEFS OF STAFF COMMITTEE

एडिमिरल सुनील लान्बा पी वी एस एम, ए वी एस एम, ए डी सी Admiral Sunil Lanba PVSM, AVSM, ADC



सेनाध्यक्ष समिति सचिवालय 263 डी, साऊथ ब्लॉक नई दिल्ली - 110011 COSC Secretariat 263D, South Block New Delhi - 110 011

Foreword

Military doctrine provides a framework for understanding "an approach" to warfare. Universally seen as a set of principles that guide the Armed forces in support of our National objectives, it does cater for future conflicts and co-opts available and future technology. 'Joint' military doctrine on its part, provides foundations for greater integration and interdependence, to achieve higher inter-operability and compatibility within the Armed Forces. The rapidly changing character of conflict is constantly throwing up new challenges thereby, behoving on the Indian Armed Forces to remain operationally current, agile, efficient and utilise scarce resources in an optimised manner.

Headquarters, Integrated Defence Staff of the Ministry of Defence has been a shining example of "Jointness" and "Integration" in the Armed Forces. The fact that the organisation has made strides in the Structures of Jointness and Integration in the varied fields of Operations, Intelligence, Technology Management, Human Resources Development, Operational Logistics, Diplomacy etc bears ample testimony to this fact. These have been adequately highlighted in the Doctrine, which is only in keeping with the commitment of the Government of India to 'Integrate' in all the fields, to the hilt.

The experience gained has been leveraged to create new structures/consolidate the existing ones to meet more challenges that will emerge in the future. An assessment of these challenges have yielded the need to have centralised policy structures, coordinated operational planning and control in certain common functions in the three Services.'

This 2nd Edition of Joint Doctrine of the Indian Armed Forces – 2017 (JDIAF-2017) elaborates on the basic fundamentals of power and excellence in war-fighting across the full spectrum of conflict. It has been ensured that this edition remains aligned with the existing Service Doctrines. As is the case with all Doctrines, the document draws on past experiences, original thinking, existing geo-strategy, threat perceptions, policies etc. It puts out in its narrative the best way to execute anything in an optimised manner with existing capabilities, capacities, concepts, structures, mechanisms, practices and crucial availability of resources. It freshly looks at new dimensions/domains in the spectrum of conflict, described as a 'triad' 'while underlining the importance of orchestrating technology in force structuring.

This Doctrine, pitched at the Military Strategic level, is meant to guide all members of the Indian Armed Forces, on the necessary concepts, principles, and ideals under which to achieve the higher goals set upon by the Political Leadership as deemed in the Indian Constitution. This Doctrine is to be a part of the initial training curriculum and should be re-visited at all subsequent stages of training and education, to extend our understanding and collative competence. The Doctrine is a reference for the policy makers, bureaucrats, technocrats, diplomats, defence industry in public/private sector, academia, fourth/fifth estate, our citizens etc.

This doctrine remains a guide – a judgement in application and on "how to think along with enterprise" by leaders at all levels.

Jai Hind!

(Sunil Lanba)

Admiral

Chairman COSC & Chief of the Naval Staff

18 Apr 2017

New Delhi

THE JOINT INDIAN ARMED FORCES DOCTRINE

CODE OF WARRIOR

I am a Warrior. Defending my Nation is my Dharma. I will train my mind, body and spirit to fight. Excel in all devices and weapons and war, present and future. Always protect the weak. Be truthful and forthright.

Be humane, cultured and compassionate!

Fight and embrace consequences willingly!

God give me strength that I ask nothing of you!

- Bhagawad Gita



"Either I will come back after hoisting the tri-colour, or I will come back wrapped in the tri-colour"

> - Captain Vikram Batra, *PVC* Indian Army, Kargil Operations

"To me, the Defence Services are the finest examples of brotherhood, family spirit and nation building. Thank you for making me a part of this great Defence family"

- Sudha Mulla, widow of Captain (IN) MN Mulla, *MVC* Commanding Officer, INS Khukri, 1971 Operations

"My mental boundaries expanded when I viewed the Earth against a black and uninviting vaccum, yet my country's rich tradition had conditioned me to look beyond man-made boundaries and prejudices. One does not have to undertake a space flight to come by this feeling".

- Wing Commander Rakesh Sharma, *Ashoka Chakra*, Indian Air Force, First Indian Astronaut

INDEX

Ser No	Contents	From	To
1	Chapter 1 – National Security – A Perspective	01	06
2	Chapter 2 – Spectrum of Conflict	07	16
3	Chapter 3 – Military Instrument of Power	17	30
4	Chapter 4 – Higher Defence Organisation	31	38
5	Chapter 5 – Integrated and Joint Structures	39	50
6	Chapter 6 – Tech Orchestration & Capability Development	51	55
7	Appendices		
	'A' – Doctrine in Perspective	56	58
	'B' – Civil Military Relations	59	61
8	Citations and References	62	62
9	Record of Amendments	63	63
10	Abbreviations	64	65
11	Bibliography	66	67
12	Acknowledgment	68	68



National Security - A Perspective

Section I

National Values, Aim and National Interests

National Values
National Aim
National Interests

Section II

National Security and Military Strategies

National Security
National Security Objectives
National Security Policy
National Security Strategy
National Military Objectives
Military Doctrine

Section III

Constituents of National Power

National Power
Hard, Soft and Smart Power
Components of National Power
Military Instrument of National Power



CHAPTER-1



NATIONAL SECURITY - A PERSPECTIVE

National Security is an appropriate and aggressive blend of political resilience and maturity, human resources, economic structure and capacity; technological competence, industrial base and availability of natural resources and finally the military might!

A definition propagated by the National Defence College, New Delhi, India

SECTION I - NATIONAL VALUES, AIM AND NATIONAL INTERESTS

National Values

1. India's National Values are our enduring beliefs reflected in the ideals of our society. National Values evolve from our Nation's culture and history, and are based on our enduring social, religious, moral and ideological principles. There is a co-relation between and among all values, no value stands alone and each contributes to the other. Our core National values are best reflected in the Preamble of our Constitution, which are; sovereignty, socialism secularism, democracy, republican character, justice, liberty, equality, fraternity, human dignity, unity and integrity of our Nation, respect for our diversity, peaceful co-existence, pluralism and tolerance andinternational peace defined by a just international order.

National Aim

2. The National Aim, as gleaned from our Constitution and strategic vision enunciated by our leadership over the years, is directed towards 'Comprehensive National Development'. Our National Aim, is to create a conducive external and internal security environment for unhindered and inclusivesocio-economic development.

NATIONAL SECURITY - A PERSPECTIVE



National Interests

3. India's National Interests are derived from the need to protect and preserve our core values as enshrined in our Constitution which are summarised as followsⁱⁱ:-



- (a) To preserve the sovereignty, unity and territorial integrity of India.
- (b) To preserve the democratic, secular and federal character of the Indian Republic.
- (c) To safeguard India's existing and emerging strategic, political, economic and military goals in consonance with the National Aim.
- (d) To ensure a stable, secure and peaceful internal and external environment conducive to unhindered economic growth and prosperity.
- (e) To contribute towards promotion of international peace and stability.

SECTION II - NATIONAL SECURITY & MILITARY STRATEGIES

National Security

4. National Securityto us implies the protection, preservation and promotion of our National Interests against internal and external threats and challenges. Maintenance of our National Security is critical as it provides us the necessary freedom, and removes all fear and hindrance in our pursuit of prosperity and happiness. India's security is an integral component of its development process. National Security and the underpinning strategies have both National and International dimensions. National Security not only entails Military Security but also influences our Politico – Diplomatic structure, Water, Economy, Energy, Food, Health, Education, Technology, Cyber, Space, Nuclear deterrence and



JOINT DOCTRINE INDIAN ARMED FORCES



Environment.

National Security Objectives

- 5. National Security Objectives flow from and are designed to safeguard our National Interests. National Security Objectives, like interests, influence our political, military, and economic dimensions. They provide a framework for the formulation of National Security Policy and ensuing Strategies. India's National Security Objectives are:-
 - (a) Maintain a credible deterrent capability to safeguard National Interests.
 - (b) Ensure defence of national territory, air space, maritime zones including our trade routes and cyber space.
 - (c) Maintain a secure internal environment to guard against threats to our unity and development.
 - (d) Expand and strengthen "Constructive Engagement" with other Nations to promote regional, global peace and international stability.

National Security Policy

6. National Security Policy is based on our National Security Objectives and the components of National Power, weighed against the prevailing and assessed future domestic and global environment. It shall entail inherent right of self-defence, possession of deterrence capability, strategic autonomy, self-reliance, cooperation, security and friendly relations with countries.

National Security Strategy

7. Our National Security Strategy (NSS) primarily revolves around safeguarding our Nation from any type of internal and external threats/aggression. In addition, our NSS encompasses preservation and strengthening of India's democratic polity, development process, internal

NATIONAL SECURITY – A PERSPECTIVE

stability and unity in its unique multi-cultural settings. Our NSS also addresses the general well-being of our vast population, the vitality of oureconomy in context of globalisation and the rapidly advancing technological world. A regional and an international environment of peace and cooperation will facilitate the safe guarding of our interests. Even though we have no formally articulated National Security Policyand Strategy, it does not imply that they do not exist or are not sufficiently understoodⁱⁱⁱ. Central to our NSS is to maintain an effective conventional and nuclear deterrent capability.





National Military Objectives

- 8. National Military Objectives (NMOs)accruing out from National Security requirements are as follows:-
 - (a) Prevent war through strategic and conventional deterrence across the full spectrum of military conflict, to ensure the defence of India, our National Interests and sovereignty.
 - (b) Prosecute military operations to defend territorial integrity and ensure favourable end state during war to achieve stated/implied political objective (s).
 - (c) Provide assistance to ensure Internal Security, when called upon to do so.
 - (d) Be prepared for contingencies at home and abroad to render Humanitarian Assistance and Disaster Relief (HADR), Aid to Civil Authority and International Peacekeeping, when called upon to do so.
 - (e) Enable required degree of self-sufficiency in defence equipment and technology through indigenization to achieve desired degree of technological independence by 2035.

Armed Forces Doctrine

9. Armed Forces Doctrine flows from our NMOs. The Armed Forces





Doctrine provides a foundation upon which the three Services must operate in synergy. The Armed Forces Doctrine underpins the development of

Service specific strategies which must complement the former. Doctrine is

not a strategy and to understand the subtle nuances of such aspects explanatory notes are as at Appendix 'A'.

SECTION III - CONSTITUENTS OF NATIONAL POWER

National Power

10. Power has always been an integral constituent of inter - state relations. Kautiliya defined it as the possession of 'Might and Strength'. In the present day global environment, our National Power gives us the ability and capability to secure our National Interests. These wouldinclude capacities inmilitary, economic, science and technology, leadership, National character, education and influence (Diplomacy).

Hard, Soft and Smart Powers

Hard Power facilitates India's use of military, economic and 11. political means to influence other States; Soft Poweriv has, through our cultural or ideological means the ability to indirectly influence the behaviour of other States. 'Soft Power' also enables us to distinguish the subtle effects of our culture, values, societal ideas, developmental assistance programs and other forms of influence on the behaviour of other States, from the more direct coercive measures such as, military action or economic incentives or sanctions. A potent form of soft power is 'intellectual power', which entails 'the knowledge and insight of the populace and their leaders'. The strength of India's soft power has been the power of assimilation. India's unique ability to embrace different cultures and the philosophy of tolerance and peaceful co-existence continues to be a source of strength for our Nation and a shining example to the world community. Smart Power would be our evaluative ability to combine Hard and Soft Power resources into effective strategies.

Components of National Power

12. Components of National Power as a concept is an extension of

NATIONAL SECURITY - A PERSPECTIVE



National Power. It encompasses a wide range of means available to us through our economy, geography, natural resources, human capital, military, internal social harmony, knowledge, information, science, technology, governance, leadership, national will, foreign policy and diplomacy etc. It is defined as the, 'comprehensivecapability of a country to pursue its strategic objectives by taking the necessary actions internationally', or 'mobilisation and utilisation ofstrategic resources of a country, to realise National Objectives'. Components entail synergistic application of all instruments of National Power to safeguard our National Interests.

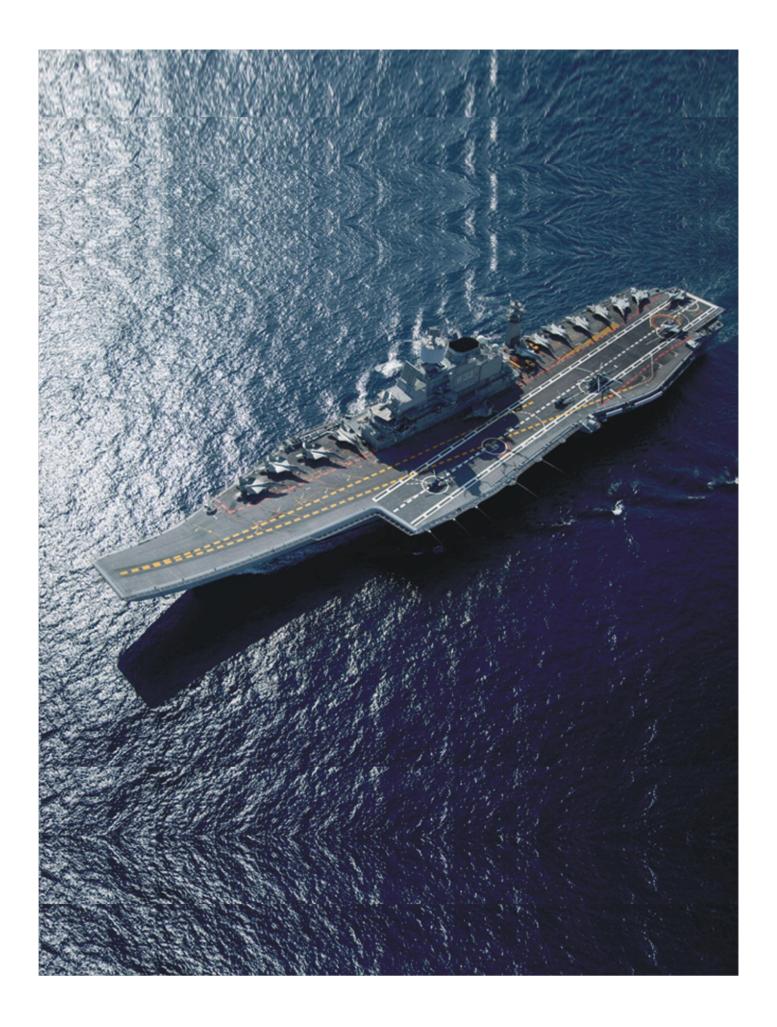


13. The key constructs of National Power are vi :-



Military Instrument of National Power

14. Military instrument of National Power is employed by us, both as a means of deterrence and conflict resolution, in support of National Security goals. Our Military instrument is not an independent phenomenon. In the words of Carl von Clausewitz, "War is a continuation of politics by other means". The ultimate purpose of our Military Instrument is to deter aggression and, when required, to fight and win our Nation's wars. Fundamentally, our Military instrument is coercive in nature; however, our military has various capabilities and can be gainfully employed during non-conflict situations and natural disasters too.



Spectrum of Conflict

Section I

Strategic Environment Scan

General India's Geography Security Threats and Challenges

Section II

Nature and Character of Conflict/ War

General
What Influences Conflict/War
Purpose of War
Levels of War
Generations of War
India in Conflict / War
Conflict Prevention
Use of Force
Conflict Termination



CHAPTER 2



SPECTRUM OF CONFLICT/WAR

"The existing State-centred approach to National Security, confined to the defence of a country against territorial aggression, has been widened to the idea of Security inclusive of a larger set of threats to the people of the State"

-Lt Gen VR Raghavan (Retd)

SECTION I -STRATEGIC ENVIRONMENT SCAN

General

- 1. As a Nation aspiring for a greater role, in the new World order, India cannot remain detached from global developments. India has to be prepared to influence the world with its geography and all elements of National Power. 'The size of our Nation, our continental relevance as well as our strategic location at the "head and heart" of the Indian Ocean gives us tremendous leverage to preserve peace, promote stability, and maintain security'.
- 2. Whilst conflict and war for territory is diminishing around the globe, however, in our context it continues to remain significant because of our disputed borders and the requirement to safeguard our territorial integrity. Strategic interests in regions along our Northern, Western and Eastern borders and sensitivities along the Line of Control (LoC) and Line of Actual Control (LAC) are to be protected with effective deterrent capabilities.
- 3. India's security environment is impacted by a number of global and regional issues and challenges. These are currently manifesting as geo-political re-balancing, increasing assertiveness by emerging powers, regional instabilities and spread of radicalism. The need to address consequences of instability and volatility in parts of our extended and immediate neighbourhood, hence remains a priority.



India's Geography

4. India is a large sub-continent with about 33,00,000 sq km territory, land frontiers running of over 15,000 km and a coastline of over 7,516 km. The National air space spans a much larger sphere and is estimated to be over approximately 40 million cu km^{vii}.



5. Our land borders and the Indian Ocean Region (IOR) remain central to India's growth and security. By virtue of this geo-physical configuration as well the resultant strategic and economic imperatives, India looks to the land trade routes and the seas to engage freely in trade and commerce, on the foundation of equality, mutual benefit and respect. Amidst ongoing efforts to impart fresh dynamism to strengthen our strategic partnerships and relations with our neighbours in a comprehensive manner, Cooperative Security viii approaches remain relevant to us. India is committed to building such strong partnerships around the globe and in our neighbourhood.

Security Threats and Challenges

- 6. India's security environment is defined by a complex interplay of regional and global imperatives and challenges. It is impacted concurrently by the positive forces of global connectivity like economic and social integration, on one side, and on the other by the obstructive consequences of unpredictability, instability and volatility that connectivity brings.
- 7. India's pursuit of transformative national growth and development necessitates a peaceful environment across the security spectrum. However, unique threats and challenges related to inherited fault lines adversely affect the security situation of our Nation that are manifesting along within increasingly blurringlines betweentraditional and non-traditional challenges.
- 8. **External Threats and Challenges**. Our external threats and challenges comprise 'traditional' and 'non-traditional' challenges. They are enumerated below:-
 - (a) **Traditional**. India's threats primarily emanate from the





disputed land borders with our neighbours. Maintaining territorial integrity and preserving National sovereignty continues to remain a major strategic challenge for India. The intensifying competition for natural resources adds an overlay of volatility to existing fault lines and pose challenges that have potential to germinate conflict. Further, transnational threats posed by the activities of State and Non-State sponsored terrorist organisations are exacerbated by the dynamics of intra and inter-State conflicts which pose a danger to regions beyond our primary theatres.India remains concerned about the presence and role of external powers in the IOR, as global geo-politics shifts from the Atlantic Ocean to the Asia-Pacific.

- (b) **Non-Traditional**. The challenges posed by non-traditional security threats range from proxy war to ethnic conflicts, illegal financial flows, small arms transfers, drugs/human trafficking, climate change, environmental disasters, security of energy/resources etc. These challenges are exacerbated by several countries vying to acquire Weapons of Mass Destruction^{ix} (WMD) and by the competition for natural resources. Their effects on regional stability and the geo-strategic environment are areas of immediate concern. Further, security of our diaspora, resources and establishments abroad, especially in the Middle East / North African regions, which are home to millions of Indians, remain central to our external security paradigm.
- 9. **Internal Threats and Challenges**. Our internalthreats manifest in different dimensions, and are briefly described below:-
 - (a) India's multifaceted internal security challenges include an ongoing proxy war in Jammu and Kashmir, insurgencies in some States and organised crime. Left Wing Extremism remains an important challenge that is sapping our National resources, while also impacting the pace of economic development of affectedregions. Illegal cross border migrations due to poor socioeconomic conditions and/or law and order situations in their home States is another challenge.
 - (b) Terrorism supported from outside is resulting in the loss of innocent lives. The fragile security environment in the Af-Pak

SPECTRUM OF CONFLICT

region and neighbouring support to proxy war in Jammu &Kashmir, lends a possibility of it being a conduit for eastward spread of fundamentalist and radical ideologies. Manifestations of these include an engineered radicalised tilt towards such ideology amongst India's youth. Mitigating it requires a multi-faceted approach facilitated by a robust intelligence network.





- (c) The easy access to high end technology has increased the threats, making it multi-dimensional. Ensuring sanctity of our land borders, protection of our airspace and long coastline is imperative and remains our priority.
- (d) Radicalisation of youth in some States by suspected social media platforms is also a contemporary challenge to National Security. The management of digital environment, which has the ability to manage conflicts through social media, merits high priority in our National Security calculus.

SECTION II – NATURE WAR AND CHARACTER OF CONFLICT/WAR

General

- 10. Conflict is as old as the existence of mankind^x. The structures and processes for conflict execution have differed over the ages, impacted by prevailing cultural, social, economic and technological positions. However, at its core, is politics and the need to rationalise conflict and its objectives. Regardless of occurrence, conflict is incontestable, however its external manifestations may vary.
- 11. The character of conflict has varied with time, yet it has endured. Technology has been a major driver to the evolution of the character of conflict. Today's stand-off precision munitions with satellite control systems have altered the physical component of conflict. The character of future wars is likely to be ambiguous, uncertain, short, swift, lethal, intense, precise, non-linear, unrestricted, unpredictable and hybrid.



What Influences Conflict/War?



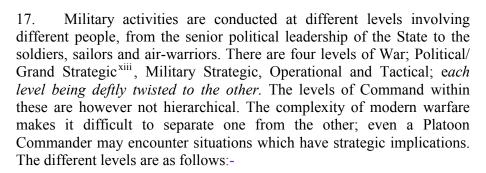
- 12. **Politics**. Political influences stem from political-ideological factors. Fundamental forces in the local, regional and global security constructs also influence conflict.
- 13. **Economy**. Economic security revolves around economic growth and is a determinant of State power. The sub-constructs involve security of resources, supply and fears of economic loss in global markets. The economic influences could accrue from attempts to balance the divergent issues that are inherent in achieving Economic security.
- 14. **Environment**. Environment has emerged as a critical area of the security paradigm. Changes in environment can result in extinction of certain States. On the other hand, soil erosion, forest cover depletion and loss of agricultural land aredominant factors for human migrations across national and international borders. Such events heighten security risks and lead to responses from States in the military dimension. Environmental security has always been dealt with by the State and eco-system disruption, energy issues, population issues, food related problems, economic issues of unsustainable modes of production and civil strife related to Environment. The fallout at times requires security responses from the State.
- 15. **Society.** Societal security is related to but is distinct from political and military security. The boundaries of the State and society are not always co-terminus. Societal identities consisting of large, small and ethnic segments alsohave serious security ramifications. Migration, social-ethnic cleansing, economic competition amongst societal groups alsoimpact State security. Society remains an essential element of the security paradigm.

Purpose of War/Conflict

16. The purpose of war/conflict and use of military force is always "political" in nature^{xi}. The political objectives of war are set in accordance with the National Security Policy. Military objectives are defined in support of these political objectives.

SPECTRUM OF CONFLICT

Levels of Warxii







- (a) Grand Strategic level, is to do with the full range of issues associated with the maintenance of political independence and territorial integrity in the pursuit of wider National Interests. It is about the co-ordinated use of the three principal instruments of National Power; Diplomatic, Economic and Military under the common influence of Information. It is as much concerned with the avoidance of war as with its conduct. Achieving these goals at this level usually requires collaboration with other Nations' governments, international organisations and agencies. Success at this level requires foresight, patience, endurance, tenacity and the ability to adapt to changing circumstances. The Grand Strategic level is probably the most important, as any decision at this level affects the other three.
- (b) Military Strategic levelis the military component of Grand Strategylevel. This level of warfare is defined by National level operations which are planned, conducted and sustained, to contribute to achieving National strategic aims, as well as synchronising action, within areas of operations. It is concerned with identification of Military Strategic objectives and is the art of developing and employing military forces consistent with these objectives. It defines the desired end state which will constitute victory. Planning is carried out by the Service Headquarters (SHQs) and Headquarters, Integrated Defence Staff (HQ IDS).
- (c) The Operational Level is the level of war at which





campaigns are planned by Command HQs/Corps HQs and equivalent level HQs in the Navy and Air Force. Operational art the skilful employment of military forces to attain strategic goals through the design, organisation, integration and conduct of campaigns or major operations. This levels links military strategy to tactics which consists of a series of tactical battles. The Operational Level employs Land; Air; Maritime; Cyberspace; Space; and Special Forces to jointly deliver a range of effects that together contribute to success in operations.

(d) Tactical level, is the level at which war fighting actuallytakes place in order to achieve operational objectives. Tactics is the art of deploying Land, Air, Maritime, Special Forces and Logistic elements to achieve success in battle. Success at tactical battles is the means towards achieving operational and



strategic objectives.

18. **Generations of War** xiv. The first Generation lasted long but the transition from the second to the current fifth generation has been rapid. It laid the foundation for Hybrid Warfare, including supporting chaos, psychological and media warfare, cyber warfare, economic warfare etc. It is a conflict characterized by a blurring of the lines between war and politics, combatants and civilians. Simply put, it is a war in which one of the major participants is not a State but rather a violent non-state actor or non-state actor sponsored by a State.

India in Conflict/War

19. India has moved to a pro-active and pragmatic philosophy to





counter various conflict situations. The response to terror provocations could be in the form of 'surgical strikes' and these would be subsumed in the sub-conventional portion of the spectrum of armed conflict. The possibility of sub-conventional escalating to a conventional level would be dependent on multiple influences, principally: politically-determined conflict aims; strategic conjuncture; operational circumstance; international pressures and military readiness. Conflict will be determined or prevented through a process of credible deterrence, coercive diplomacy and conclusively by punitive destruction, disruption and constraint in a nuclear environment across the Spectrum of Conflict. 'Integrated Theatre Battle' xv with an Therefore, undertaking operationally adaptable force, to ensure decisive victory in a network centric environment across the entire spectrum of conflict in varied geographical domains, will be the guiding philosophy for evolution of force application and war fighting strategies.

Conflict Prevention

- 20. Wars lead to loss of men and material. In some cases it can lead to destruction of a Nation. They also slow down if not completely stop, developmental activities. Strategists throughout history have sought to prevent war and settle disputes through peaceful means. Thus, the dictum 'prevention is better than cure', finds its application in conflict prevention and seeks to address the root causes of conflicts. Apart from other measures, wars can be prevented through show of force, mutual confidence building or military activities under United Nations (UN) mandate.
- 21. **Deterrence**. States are normally restrained by their mutual fear of each other's war-waging potential. War-waging potential is therefore, a credible threat to discourage a potential aggressor. The policy of deterrence aims to present the potential belligerent with an unacceptable degree of damage in proportion to his potential gains. A credible deterrence capability strengthens a Nation's diplomatic leverage and is a major factor in the 'test of wills' between countries.
- 22. **Coercive Diplomacy**. Coercive diplomacy is another option of maintaining peace through show of force. It aims at applying or threatingto apply military force in support of diplomatic, economic and other

JOINT DOCTRINE INDIAN ARMED FORCES



pressures, to force the belligerent to comply with the conditions, thereby preventing war. Instruments used for coercive diplomacy are diplomatic



isolation and economic sanctions backed by projection of military force with a threat to use it.

- 23. **Coercion and Deterrence**. Coercion and Deterrence aim to counter threats to our security by communicating to potential adversaries the consequences of their anticipated action or inaction. Deterrence and coercion are ways by which our government might seek to secure policy ends. Deterrence and Coercion will be contested; opponents will assess how they value the interests of their State or group, compared to the coercer's interests; their perception of the balance of power; the bargaining space: whether there are alternative acceptable outcomes available; and their expected gains and losses. Therefore, it is crucial and essential to fully understand the framework, including the cultural, institutional, ideological, motivational factors and the prevailing political, economic and strategic situation as an opponent perceives.
- 24. Deterrence and Coercion strategies will only succeed if an opponent understands that the threats (or incentives) are credible xvi. Effective deterrence and coercion strategies comprise four principles: credibility; communication; comprehension; and capability. xviii
- 25. **Confidence Building Measures**. Confidence Building Measures (CBMs) allow adversaries to communicate and exchange information in ways, which reassure each other and obviate the need for a militaryaggression or escalate an ongoing war to a higher level. Mutually agreedtreaties with provisioned clauses for disclosing troop movements, exercise schedules and even supervision in certain cases form the basis of CBMs.

Use of Force

- 26. In case conflict prevention is not successful through deterrence or coercion, military force must be used to compel the adversary to submit. Military force can be used in the following ways:-
 - (a) **Destruction.** Destruction seeks to annihilate the adversary. It involves employment of military forces to secure

SDEC --- IM OF CONFLICT

15

National objectives by direct application of force. It will be a well-calibrated conventional response. The most obvious use of military force is to destroy the adversary's military resources to prevent him from using it for his own purposes, thereby bringing about his defeat.

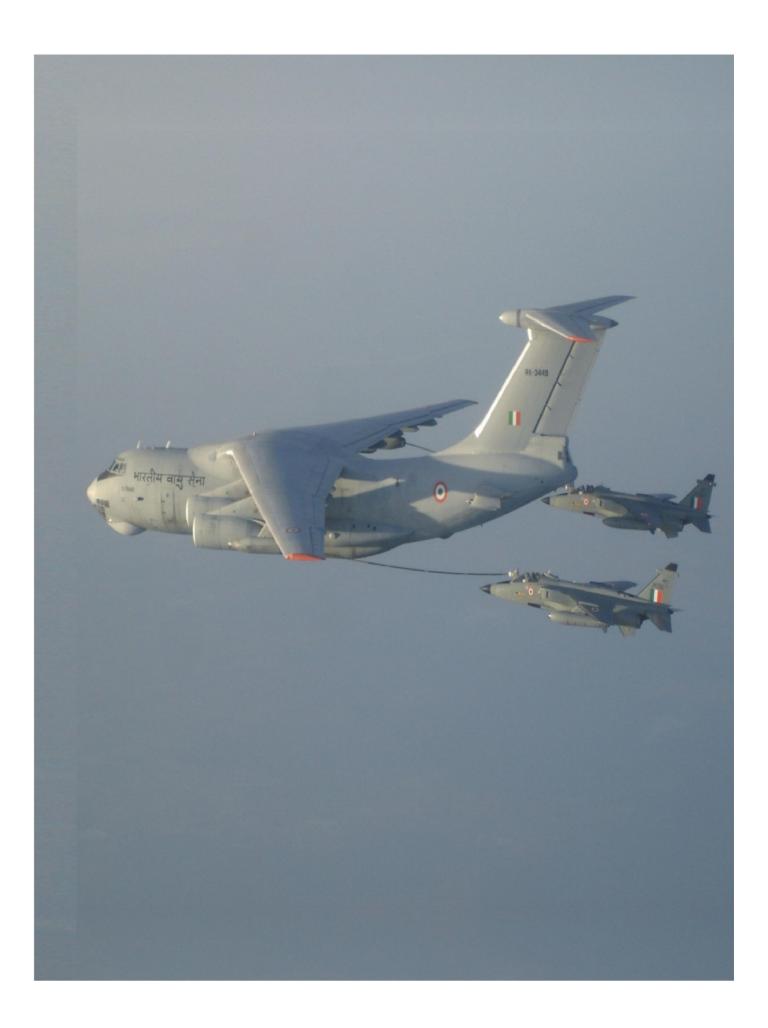




- (b) **Disruption**. Whereas Destruction seeks to annihilate the adversary, Disruption is a lower form of armed conflict designed to shatter the cohesion of an adversary's military force to prevent it from functioning effectively in combat. It may be achieved by destroying elements essential for cohesion, such as the command and control (C2) systems. It may also be achieved by degrading the morale of the enemy or disrupting the decision making ability of the adversary without use of force.
- (c) **Constraint.** Constraint is a type of denial, which involves the use of force to deny something without destroying it; for example, blockade or economic sanctions imposed against a Nation.

Conflict Termination

- 27. Conflict termination is a strategy to bring war to a most favourable conclusion. Military plans and operations serve to support the attainment of political objectives. Therefore, these should focus on achieving the political objective by establishing conditions necessary tosustain the objective following conflict termination. The terms and conditions under which a conflict is terminated must address our underlying cause(s) of war. This calls for planning based on the desired end state, ensuring that the long-term political objective of the post-conflict environment is preserved following conclusion of conflict. It should ensure that the terms and conditions imposed on the adversary to cease hostilities are enduring.
- 28. Conflict termination is a facet of operational art. However, if the duration and cost of war escalates, termination assumes strategic proportions. Timing of terminating a military operation and to preserve achieved advantage is a component of both strategy and operational art.



Military-An Instrument of National Power

Section I

Military Instrument and Roles

Section II

Functions of Military Power

Conventional Sub-Conventional Non-Combat

Section III

International Defence Cooperation & Diplomacy

Section IV

Application of Military Power

Section V

Direction of Military Instrument of Power

Section VI

Concepts of Military Power Application

Land Force Power

Sea Power

Air Power

Cyber Power

Space Power

Special Forces Operations

Section VII

Joint Operations

Air-Land Operations Air Transport Operations Air Borne Operations Maritime-Air Operations Amphibious Operations Battle Space Awareness



CHAPTER 3



MILITARY – AN INSTRUMENT OF NATIONAL POWER

One must be clear when Diplomacy of persuasion must end and Diplomacy of threat of force and force itself should be considered!

- K Subrahmanyam Strategic Affairs Analyst

- 1. "Defence of India and every part thereof including preparation for defence and all such acts as may be conducive in times of war to its prosecution and after its termination to effective demobilization" is given in the Seventh Schedule (Article 246) List I of the Union List. The "Deployment of any Armed Force of the Union or any other force subject to the control of the Union, ..." is also given in the Seventh Schedule. The spirit for employment of the Armed Forces (Military Power) of the Union is towards the Defence of the Union. Manifestations of the term 'Defence of India' are manifold, elucidations of which are being translated into the employment of the Armed Forces of the Union as described in this Chapter.
- 2. At any given point in time, India will be in one of the 'states' along the spectrum of conflictie peace, conflict or war or a combination thereof. When we act in our National Interest, it involves the pursuit of political, economic, ideological or cultural objectives. When the interests of India or its strategic partners are in harmony, or are posed with no real or perceived threat from adversaries, there is peace. However, when the actions or policies of an adversary become a threat to our National Interests, a condition of conflict arises.
- 3. 'Military Power' is one of the most versatile, flexible and adaptable tool available with the Nation in such 'threat' situations and needs to be employed correctly. It's employment must provide requisite options to achieve the desired outcomes by our political leadership.

MILITARY – AN INSTRUMENT OF NATIONAL POWER

4. The nature of future warfare requires harmonious and synergistic application of land, air and sea forces. Joint operations are the most essential requirement of future wars and have to focus on the seamless application of all available resources to shock, dislocate and overwhelm the belligerent. This necessitates an intimate understanding of the capabilities and limitations of each Service by the other two. An optimal impact is achieved by evolving a Joint operational plan which effectively integrates all allocated resources. Joint operations encompass all actions required tosuccessfully achieve a designated Joint objective(s) and involves activities relating to marshalling, deploying and employing the allotted forces. It also includes the intelligence, communication and logistic functions in support of such operations.





SECTION I - MILITARY INSTRUMENT AND ROLES

- 5. The Military Instrument consists of the three Armed Forces of the Union Indian Army (IA), Indian Navy (IN) and Indian Air Force (IAF) and elements in support. The Military Instrument is characterised by two fundamentals *ie* providing insurance and assurance to the Nation and its employment towards these purposes. The Seventh Schedule of the Constitution of India states 'Defence of India', 'Insurance' is towards that purpose and embodies its people, territory and wealth in allforms. The second fundamental- 'assurance' is towards engagement in our current external and internal challenges. To ensure the two fundamentals, the Military instrument must remain razor sharp, lethal and precise.
- 6. The Armed Forces serve as the ultimate instrument for maintaining the unity and the integrity of the Nation in the face of external threats and internal unrest and disturbances. The major roles of the Armed Forces, encompassing both domestic and international responsibilities are as follows: -
 - (a) Safeguard sovereignty, territorial integrity and unity of India and preserve National Interests against any threat in the entire spectrum of conflict by possessing and projecting a robust deterrence capability or by application of force, as required.





- (b) Assist civil authorities to cope with internal threats/contingencies and provide necessary aid, when requested.
- (c) Participate in peacekeeping operations and protect the global commons under UN charter.
- (d) Render military assistance including HADR to friendly foreign countries, when requested.
- (e) Progress military diplomacy to constructively engage with defence forces of friendly foreign countries.

SECTION II - FUNCTIONS OF MILITARY POWER

Conventional

- 7. Conventional War will fall under the "Military Role" and encompass the following operations:-
 - (a) Offensive Operations. The purpose of offensive operations is to attain the desired end state and achieve decisive victory. Offensive operations aim at addressing the adversary's centre of gravity. This is achieved by attacking enemy's criticalities, either simultaneously or sequentially. In the prevailing geo-political environment, some critical planning parameters are maintaininga perennially high degree of operational preparedness; capability to mobilise swiftly for an early launchto rapidly achieve tangible gains. Offensive operations will seek to seize the initiative from the enemy, retain it and exploit the dividends accruing from such actions. These operations will end when laid down objectives are achieved.
 - (b) **Defensive Operations**. A philosophy of pro-active defence is most suited for India, considering its geo-political imperatives. Defensive operations are necessary to guardterritorial integrity and vulnerabilities, ensure the security of ownforces, secure bases for launching strike forces and create

MILITARY - AN INSTRUMENT OF NATIONAL POWER

favourable conditions for offensive operations to be undertaken. It enables us to optimise time, hold critical geographical space, facilitate other operations, hold, degrade and destroy the enemy resources. Defensive operations will be intrinsically aggressive in design and offensive in conduct.



Sub Conventional

Low Intensity Conflict Operations /Low Intensity Maritime **Operations**. Low Intensity Conflict Operation (LICO)/ Low Intensity Maritime Operation is a politico-military confrontation between contending States or groups, below conventional war and above routine peaceful competition among States. Proxy war is being waged against India, by an inimical adversary, engineered through hybrid elements. Countering this proxy war mandates concomitant capabilities and establishment of a robust Counter Infiltration and Counter Terrorism Grid.Counter Proxy waris being waged through a number of means vizpolitical, economic, social, cultural, psychological, informational and military. In combating Low Intensity Conflict (LIC), the Military dimension is not dominant, as in conventional war, but supportive - it is low profile, restrained and people-friendly nature. At the tactical level, Military operations in LIC may include direct actions such as raids, cordon and search, show of force etc. At operational and strategic level, these operations are conducted for creating a situation conducive for implementation of political, economic and psychological actions. The key planning parameters for conduct of Joint operations in LICO would entail joint planning, intelligence, communications, authority and utilisation of assets.

Non-Combat

9. Aid to Civil Authority. Non-combat operations are conducted primarily to assist the civil administration to meet sudden challenges to internal peace and tranquillity, caused by local disturbances initiated througha segment of population or due to natural or man-made calamities. Defence Crises Management Group (DCMG) is the apex body to coordinate response of the Armed Forces for all crises situations. The constitution of DCMG and its mandate provides for and facilitates a well





conceived and coordinated response from the Indian Armed Forces. While the Armed Forces will be able to deploy speedily, provide relief and bring

the situation to a state manageable by the civil administration, it must be noted that management of disasters is primarily a State subject and the Armed Forces only assist the process of stabilisation.

- 10. **Maintenance of Law and Order**. Amongst all the duties generally performed by the Armed Forces in aid to civil authority, maintenance of law and order is the most important and sensitive one. The levels of violence encountered in such commitments have been progressively escalating. Under such conditions, deployment and conduct of the Armed Forces has to be thought through and planned meticulously bearing in mind prevailing sensitivities. The Armed Forces work on the well established principles of good faith, use of minimum force and prior warning to the people whenever they are compelled to take action.
- 11. **Humanitarian Assistance and Disaster Relief**. The Indian subcontinent is home to 70% of the world's natural disasters like floods, droughts, cyclones, earthquakes etc in addition to man-made. Man-made disasters include global warming, wildfires, epidemics, etc. The impact of these disasters is more pre-dominant in under-developed and remote areas, where facilities to handle such calamities do not exist. Succor needs to be provided to the affected population/people during disasters/distress situations by rendering necessary assistance keeping in mind the following:-
 - (a) Humanitarian assistance should enhance National Security Interests and therefore the operational readiness of the Armed Forces performing such missions should be optimum at all times.
 - (b) The readiness will entail provisioning of medical care, basic sanitation facilities, repair of public amenities and facilities, education, training and technical assistance. This function will also be performed by the Armed Forces (DCMG) in close coordination with the National Disaster Response Force. It may be utilised in an international situation, as also to address the needs of the Indian diaspora abroad.

MILITARY – AN INSTRUMÊNT OF NATIONAL POWER



SECTION III – INTERNATIONAL DEFENCE COOPERATION & DIPLOMACY

- 12. **International Defence Cooperation**. We will need to reach out and build defence partnerships with countries, big and small. It is a vital element for evolving extensive common standards in military terminology to military equipment to operating standards to ensure complete and effective inter-operability. It remains essential for us to also contribute to the security of other States and the international system as a whole. International Defence Cooperation is an imperative for building our capabilities to deal with our envisaged current and emerging role in the international arena. Our military representation at our Missions abroad need to be progressively enhanced to make than consistent with our current and future objectives. Long-term and annual objectives, for international cooperation/defence diplomacy, must be drawn up in close consultation with Heads of Missions, Ministry of External Affairs (MEA) and Ministry of Defence (MoD). Our military capabilities and diplomacy should be leveraged towards achievement of our National Security Objectives and the Armed Forces of the Union must remain essential to that endeavour.
- 13. **United Nations Operations**. India's Armed Forcesare an active participant in UN peacekeeping missions and have earned the respect and admiration of the world for being an impartial and professional Force. Peacekeeping missions are formally established after a resolution is adopted by the Security Council of the UN and a mandate to that effect is issued. Based on the mandate, missions can be classified as peacekeeping (Chapter VI) or peace-enforcement (Chapter VII) as spelt out in the UN Charter. Indian Government directives and policies govern execution of this function by the Armed Forces.
- 14. **Defence Diplomacy**. Defence diplomacy is gaining increasing importance in the modern day geo-political environment. It has emerged as an effective option for both power projection and conflict resolution, albeit with military power to back it up with deterrence and coerciveness. Defence Diplomacy serves specific National foreign and security policy objectives. Defence Diplomacy achieves foreign policy objectives by leveraging the synergy in the Armed Forces. It promotes India's soft power and enhances Nation's reputation as a responsible power. The





emerging relationship between military power and political purpose in our global strategymust be contextualized to regional /international demands for our Military Services.

SECTION IV - APPLICATION OF MILITARY POWER

- 15. Military Power will be applied whenever the designated roles of the Armed Forces have to be fulfilled, at a place and time of our choosing. The application of Military Power should be in continuation and through integration with the other instruments of National Power (Diplomatic, Economic, Information, etc). The application should reflect our National values and beliefs conjoined with international norms and underpinned by our National Interests.
- 16. Military Power should not be used if the situation does not threaten our National Interest; if it is not whole-hearted with adequate force level and resource; have clearly defined political and military objectives; if we are unwilling to re-assess at any stage, the balance between our committed forces and objectives; the support of the Nation is absent and finally it should always be an instrument of last resort.

SECTION V - DIRECTION OF MILITARY INSTRUMENT OF POWER

17. The Command of the Armed Forces of the Union of India is vested with the President of India, who is the Supreme Commander of the Armed Forces. Control of Military Power is exercised through the Prime Minister (PM) and his council with specific responsibility assigned to the Defence Minister (RakshaMantri {RM}). The Chiefs of Staff Committee (COSC) which comprises the Chairman (senior most serving Chief of the three Services) and the balance two Chiefs, exercise executive control on Joint matters, while individual Service Chiefs exercise operational and administrative control of their respective Services on respective Service functioning. All executive actions of the Armed Forces are governed by directives from the RM.

MILITARY – AN INSTRUMENT OF NATIONAL POWER





SECTION VI - CONCEPTS OF MILITARY POWER APPLICATION^{xviii}

18. The concepts of Military Power application of the three Armed Forces have congruence in the fact that manifestation of effect (consequent to force application) ultimately has to fructify on land.

Land Force Power

- 19. The threat paradigm of large disputed land borders, directive to defend territorial integrity and response options over the entire spectrum of conflict, in the realm of defensive and offensive operations, guide the employment philosophy of land forces. The overall force generation matrix is to be achieved through optimum force structuring, modern equipment and effective training across all types of terrain and climaticconditions. Land forces can be employed singly or in conjunction with the other two Services in conventional and sub-conventional role during Joint operations at a very short notice. Capabilities through specialised forces are to be maintained to fight persisting sub-conventional threats with timely re-orientation, for conventional employment/deployment. Application of Land combat potential/power by Land Forces will be aligned to the principles of war through effective C2 on the battle field resulting in operational success.
- 20. **Border Management**. The various borders are manned on the concept of 'one border one force'. The sanctity of international demarcated borders is the responsibility of Central Armed Police Forces. The Line of Control (LoC), Actual Ground Position Line and Line of actual control (LAC) remain under the operational control of the Indian Army. During war, all border guarding organisations come under the operational control of the Army. Being the first tier of defence, their integration, training and operational procedures must provide seamless transition to the war fighting effort. The Indian Army consequent to its pan-India presence would also form part of the security mechanism for coastal security.

Sea Power

21. Warfare has become exceedingly complex and includes





multifarious disciplines. The full range of operations in which a Nation's maritime forces may be involved is extremely wide. Two specific and important concepts are elucidated below:-

- (a) **Sea Control**. Sea Control in single/joint operations implies, to be in a position where one is able to use a defined sea area for a defined period of time, for one's own purposes, and at the same time prevent an adversary from using it for his advantage^{xix}. Sea Control, in other words, affords freedom of action to those who possess it but denies it to those who do not. This is often the first step to begin, sustain and support Joint operations like Amphibious Operations, Blockade and Sea Lines of Communication (SLOC) protection/interdiction.
- (b) **Sea Denial**. Sea Denial is a concept of denying the adversary the use of the sea area for a certain period of time, while not attempting to control the sea itself^{xx}.

Air Power

22. Air Power is employment of air power assets of the Nation to assert its will through the medium of air to achieve National Security Objectives. Air power with its intrinsic characteristics of speed, elevation and reach provides tremendous strategic options. These strategies will be prosecuted by air campaigns which comprise a variety of air operations. These operations will be to deter, contain or defeat the enemy's air Counter air, strategic air (including space) and counter surfaceforce operations are the three elements of air strategy with combat enabling operations forming the fourth pillar. The flexibility, versatility, speed, and reach of modern aerial platforms and weapons will allow aCommander to conduct parallel/inter-dependent operations prosecuting all campaigns simultaneously as also engage enemy surfacetargets, within and outside the battle space. All the air campaigns can be conducted independently, parallel with, or in support of surface/maritime operations.

Cyber Power

23. Cyber Power is the ability to use cyberspace freely and securely to

MILITARY - AN INSTRUMENT OF NATIONAL POWER



gain an advantage over the adversary while denying the same to him in various operational environments, and by applying the instruments of National Power. In the globalised world economy of today, cyberspace has probably become the single-most important factor that provides necessary linkages, stores information, facilitates business transactions and acts as an effective medium for instant delivery of services. Therefore, it forms an ideal platform for expediting the development processes and proliferate the benefits to the masses instantly. The high value cyber assets make the Critical Information Infrastructures of the Nation, which must be protected at all costs, to enable the core and routine state businesses function uninterrupted.

Space Power

24. Space is a medium like land, sea, air and cyber through which various activities are likely to expand in the future. Emergence of space power is analogous to conventional land, sea or air power that will mark it out as a 'Revolution in Military Affairs'. Space bestows immense force multiplication capability on the Armed Forces, and the dependence on space assets for military operation is rapidly increasing. Currently, India's space capabilities are mostly driven by civil and commercial requirements, steps for exploitation of space for military applications towards which steps are being undertaken. Leveraging space power would include protection of our National space assets and exploitation of space to enable defence capabilities across the conflict spectrum.

Special Forces Operations

25. Special Forces operations will be conducted in support of offensive and/or defensive operations. Operations are to be conducted by specially selected troops of the Armed Forces (Army, Navy and Air Force) who are trained, equipped and organised to operate in hostile territory in all dimensions - land, air and sea; and can also be employed isolated from the main combat forces. Special Forces of the - Army are designated for operations in all dimensions; Navy are mandated for operations in the Maritime domain; and Air Force are mandated for protection of critical air bases/assets. Such Forces may operate independently or in conjunctionwith other Forces at the operational level. They are versatile, have



reach, can make precision strikes at targets of critical importance and must be provided access to the maximum possible intelligence inputs relevant to the task while maintaining absolute security in respect of their intended employment. The principles of 'direct control' and 'mission command' will be exercised during their employment. Special Forces units will be tasked to develop area specialisation in their intended operational theatres to achieve an optimum effect.

SECTION VII – JOINT OPERATIONS

Air- Land Operations

- 26. The aim of Air-Land operations is to seek and strike deep to destroy/degrade the adversary forces at each stage of battle. This enables own land forces to quickly capture the designated objective(s) with the least number of battle casualties. Successful prosecution of these operations depend on the following:
 - (a) Availability of real time intelligence of the adversary forces.
 - (b) Surprising and shocking the adversaries' forces through concentration of firepower on the objective(s).
 - (c) Simultaneity and depth in operation(s).
- 27. Land forces will carry out offensive and defensive operations based on the directives of the controlling authority. Speed and reach of air power will be utilised for rapid engagement of enemy surface targets within and outside the battle space. Air power would also be tasked to destroy/degrade the adversaries' air power so as to remove/minimise any interference in operations by own land forces.

Air Transport Operations

28. Air transport operations comprise of both strategic and tactical airlift. Such operations allow for effective and timely mobilisation of Land and Air forces where surface transportation is inadequate. Such operations are also executed when time is limited to undertake Special Operations.

MILITARY - AN INSTRUMENT OF NATIONAL POWER

Similarly air maintenance operations by both fixed and rotary wing aircraft play a vital role in sustenance of combat troops in areas inaccessible by surface transportation. These also help sustain Airborne/Heliborne forces till a link up is affected. The Air Force undertakes Special Operations whenever required for inserting troops into enemy territory to carry out operations.





Airborne Operations

- 29. Airborne operations are conducted in hostile territory for executing an assault landing from the air either independently or in conjunction with other operations. It can be at the strategic or operational level. Airborne operations achieve simultaneity of force application. It provides an opportunity to gain a foothold across obstacle systems in conditions where other land forces will require considerably longer time to be effective. Surprise and Deception plays a vital role in success of airborne operations. Airborne operations could involve one or more of the following:-
 - (a) **Airborne Assault**. Forces are para-dropped into an objective area. These forces require specialised training for the task.
 - (b) **Air Landed**. Combat forces are landed by fixed wing/rotary wing aircraft near the objective area.
 - (c) **Special Heliborne Operations**. These are operations wherein helicopters are used for insertion and extraction of combat forces, both by day and night.

Maritime Air Operations

30. The Maritime Air Operations (MAO) will be carried out based on the requirement projected by the Integrated Headquarters of Ministry of Defence (Navy) {IHQ-MoD (N)}, related to the operations being conducted at sea. The IHQ-MoD (N) and Air HQ will consult each other and issue directives to their Naval/Air Command(s). MAO will be directed against targets at sea or enemy naval facilities ashore, as



follows:-



- (a) Attack against Targets at Sea. Detection and identification of targets at sea is the responsibility of the Navy through the Maritime Reconnaissance (MR) aircraft and other naval sensors. The naval forces at sea will use their integral firepower including the Air arm to destroy/neutralise the target. Based on Joint plans, aircraft of the IAF will be tasked to attack the target in conjunction with the ship/MR aircraft of the Navy. The aircraft could also operate in a stand-alone mode.
- (b) Attacks against Enemy Naval assets Ashore. Attacks against enemy naval assets ashore will be coordinated with the naval operations at sea. Coordinated strike along with Air Force could be planned to bear concentrated firepower upon the enemy. Certain strategic targets like oil terminals at sea or dockyards may also be targeted in conjunction with Naval surface fire support to aid the overall aim.

Amphibious Operations

31. Strategic payoffs in a conflict will be predominantly influenced through results of action on land. This is achieved jointly with other elements of National and Military power. Amphibious operations are Joint Military operations wherein land power is projected ashore from the sea. Amphibious operations may be conducted in order to capture or recapture territories, obtain a site for an advance naval base or air base, deny the use of an area or facilities like a port to the enemy, further land operations from ashore, or to show presence.

Battle Space Awareness

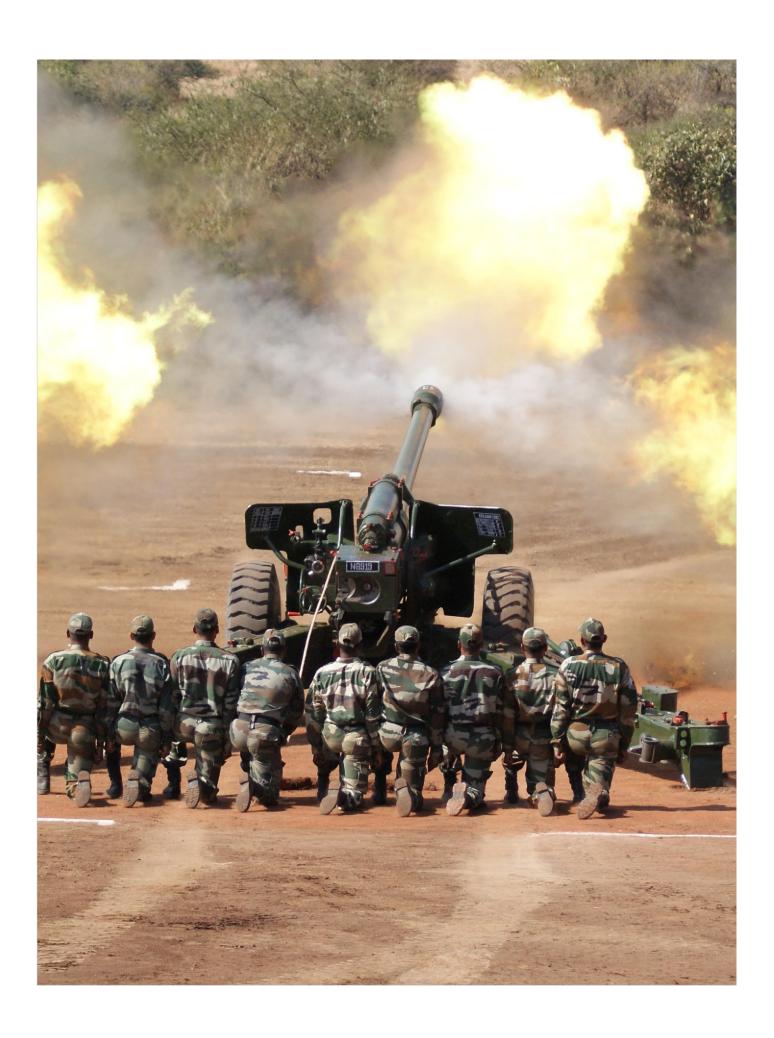
32. Reconnaissance and Surveillance of land/maritime/air battle domains will be conducted utilising a broad spectrum of ground, sea, air and space based sensors. Inputs of strategic reconnaissance using aerial platforms and satellites will also be made available/exploited. Emphasis is to be placed on timely evaluation and dissemination of intelligence data to the concerned agencies with an intention of shortening the observation to engagement cycle.





CONCLUSION

33. The continuum of operations in which the Nation's Armed Forces may be deployed synergistically extends from 'war' at one end to 'aid to civil authorities' at the other end. The application of Military Power should be directed towards synchronization and integration of various elements of combat power so that their effects complement and reinforce each other. The force structures should cater for assurance, deterrence and war fighting in the entire spectrum of conflict.



Higher Defence Organisation

Section I

Ministry of Defence Principal Task Role and Responsibilities

Section II

Apex Security Authority Cabinet Committee on Security National Security Council

Section III

Chiefs of Staff Committee
Responsibility
Secretariat of Chairman COSC

Section IV

Apex Military Authorities HQ Integrated Defence Staff Integrated HQ of MoD (Army) Integrated HQ of MoD (Navy) Air Headquarters

Section V

Command and Control

Section VI

Nuclear Command Authority

Diagrammatic Representation-Higher Defence Organisation

Conclusion

CHAPTER 4



HIGHER DEFENCE ORGANISATION

The phrase Higher Defence Management usually conjures up images of only the Military but this is not correct as Defence Management encompasses much more. No doubt, the Indian Military is a significant player in this endeavour but unless all Instruments of the Nation are brought together, the concept of Higher Defence will remain incomplete.

- Lt Gen Vijay Oberoi (Retd)

1. The Government of India (GoI) is responsible for ensuring the 'Defence of India' and every part thereof. The Supreme Command of the Armed Forces of the Union of India is vested with the President of India who is the Supreme Commander of the Armed Forces. Article 52 of the Constitution stipulates that National Defence is to be managed through Cabinet Control which implies that PM has to get Cabinet approval for every significant decision, both during peace and war. The secretarial aspect for this function is discharged through the MoD which provides the policy frame work and necessary wherewithal to the Armed Forces to discharge their responsibilities in the Defence of the Nation. The RM is the head of the MoD.

SECTION I - MINISTRY OF DEFENCE

Principal Task

2. The Ministry of Defence acts as an interface between Armed Forces and other Ministries/Departments/Parliament. The principal task of the MoD is to obtain policy directions of the Government on all defence and security related matters and communicate them for implementation to the Service Headquarters (SHQs), Inter-Service Organisations, Production Establishments, Research and Development (R&D) Organisations, etc. The MoD is accountable to Parliament for all expenditure and responds to all debates concerning Defence. The Ministry also arranges finances and wherewithal for the Armed Forces.



Roles & Responsibilities

3. The roles and responsibilities of the MoD Secretariat^{xxi} comprising of four Departments are defined in the Government of India (Allocation of Business Rules - 1961) {as amended upto 01 Oct 2016}. The departments and their responsibilities in brief are as follows:-



- (a) **Department of Defence**. The Department of Defence or RakshaVibhag is responsible for the 'Defence of India' and every part thereof including preparation for defence and all such acts as may be conducive in times of war to its prosecution and after its termination to effective demobilisation.
- (b) **Department of Defence Production**. The Department of Defence Production or RakshaUtpadanVibhag controls all defence related Public Sector Undertakings like Ordnance Factories Board and Ordinance Factories, Hindustan Aeronautical Limited, Bharat Electronics Limited, Mazagon Docks Limited, Director General Quality Assurance, Defence Exports etc.
- (c) **Department of Defence Research and Development**. The Department of Defence Research and Development or Raksha Anusandhan Tatha Vikas Vibhag is responsible for apprising, assessing and advising the RM on the influence of science and technology on National Security. It also renders advise to RM and the three Services on scientific aspects of defence equipment.
- (d) **Department of Ex-Servicemen Welfare**. The Department of Ex-Servicemen Welfare or PoorvSenaniKalyanVibhag is responsible for all matters relating to Armed ForcesVeteransincluding pensioners, matters relating to Directorate General of Resettlement and KendriyaSainik Board.

SECTION II - APEX SECURITY AUTHORITY

Cabinet Committee on Security

4. This is the highest body at the apex level and is responsible for





taking all decisions on all aspects of security. Defence policy decisions and directives are determined by the Cabinet Committee on Security (CCS), through which the GoI exercises political control over the Armed Forces. Towards this end, it is prudent that congruence in the two timetested institutions exists/is built upon for a right balance of unambiguous political control, as dwelt upon at Appendix 'B' on "Civil-Military Relations".

5. The Committee also decides on Defence related expenditure, matters of National Security and approves significant appointments. The Committee is chaired by the PM and includes the Cabinet Ministers of Defence, Home, External Affairs and Finance. Other Cabinet ministers attend as special invitees, whenever required. In addition, the Chairman COSC (Ch COSC) and the Service Chiefs are in attendance, on as required basis. Similarly, the Cabinet Secretary or any other Secretary to the GoI will attend, whenever required. The CCS is assisted in decision making with inputs from various agencies. Some of the important agencies are appended in the succeeding paragraphs.

National Security Council

- 6. The National Security Council (NSC)is the core agency of the Government that fuses the elements of National Power. The seven member Council is a Cabinet level body chaired by the PM. It consists of the Ministers of HomeAffairs, Defence, External Affairs, Finance, National Security Advisor (NSA), Deputy NSA and the Deputy Chairman of the National Institution for Transforming India (NITIAyog)^{xxii}. The NSA is the Chief Executive of the NSC and acts as points-man to service the Council. It deals with all issues that threatens or has the potential to threaten India's external and internal security. NSC is in effect an advisory body. The authority for execution of directives lies firmly with the Ministries. The Council and its associated structures are expected to focus primarily on a multi-disciplinary approach to securityissues, long and medium range assessment of threats, challenges and opportunities. The NSC comprises three structures – the Strategic PolicyGroup (SPG), the National Security Advisory Board (NSAB), and the National Security Council Secretariat (NSCS), as follows:-
 - (a) NSCS. The NSCS is a specialised unit under the direct

HIGHER DEFENCE ORGANISATION



charge of the NSA in the Prime Minister's Office (PMO). The NSA is the primary advisor to the PM on National and international security affairs and strategic issues. All Ministries/Departments consult the NSCS on matters having a bearing on National Security. It is headed by Deputy to the NSA, who acts as the Member Secretary to the NSCS.

- (b) **Strategic Policy Group**. The 16 member Strategic Policy Group (SPG), comprising the Chiefs of the three Services, heads of important security related Ministries, and Chiefs of the major intelligence agencies. It is the principal mechanism for inter-Ministerial coordination and integration of relevant inputs in the formulation of National Security policies. The Cabinet Secretary chairs the SPG.
- (c) National Security Advisory Board. The National Security Advisory Board (NSAB) comprises a nominated convenor and other people of eminence outside the governmentwith expertise in various fields. NSAB advises the Security Council on the issues of National Security.

SECTION III - CHIEFS OF STAFF COMMITTEE

Responsibility

7. COSC is a forum for Service Chiefs to discuss matters having a bearing on the activities of all the three Services and to advise MoD accordingly. It is responsible for ensuring readiness of the Indian Armed Forces, in all respects, to meet National Security Objectives as laid down by the political authority. The COSC renders advice on all National Security issues to the RM. The ChCOSC provides the link between the political leadership and the Armed Forces. The senior most Chief is the Chairman and is 'first among equals'.

Secretariat/General Assistance

8. The Ch COSC and COSC is assisted in functioning by the





HeadquartersIntegrated Defence Staff (HQ IDS), which is headed by the Chief of Integrated Defence Staff to Chairman COSC (CISC). CISC is the non-voting member in the COSC.

SECTION IV - APEX MILITARY AUTHORITIES

HQ Integrated Defence Staff

9. HQ IDS is a Tri-Service Organisation. The Ch COSC, supported by the secretarial staff of HQ IDS interacts with the SHQs, other Ministries and Departments. HQ IDS is presently functioning as staff in an advisory role to the Ch COSC, and is headed by CISC.

Integrated HQ of MoD (Army)

10. The Chief of the Army Staff (COAS), a four-star officer in the rank of General, commands the Indian Army (IA). As a major component of National Power, the primary responsibility of the Army is to preserve National Interests and safeguard our sovereignty, territorial integrity and unity of India against external or internal aggression through deterrence or by waging war.

Integrated HQ of MoD (Navy)

11. The Chief of the Naval Staff (CNS), a four-star officer in the rank of Admiral, commands the Indian Navy (IN). The Navy is the principal instrument and manifestation of the maritime power of our Nation^{xxiii}. The *raison d'être* of the Navy is to safeguard our maritime frontiers, and ensure the use of the seas for India's legitimate sovereign purposes, whilst concurrently guarding against inimical use of the sea by others. The Navy plays a central role in safeguarding and promoting India's security and National Interests in the maritime domain.

Air HQ

12. The Chief of the Air Staff (CAS), a four-star officer in the rank of Air Chief Marshal, commands the Air Force. The primary objective of

HIGHER DEFENCE ORGANISATION

IAF is safeguarding Indian airspace and National Interests from all air threats in conjunction with the other wings of the Armed Forces. The IAF provides specific battlefield air support to the IA and the IN and also caters to their strategic and tactical airlift requirements.





SECTION V - COMMAND AND CONTROL

- 13. Our C2 is underpinned by a philosophy of centralised intent and decentralized execution this enables freedom of action and initiative. The spirit in the concept remains to describe the 'what' and not specify the 'way'.
- 14. At strategic level, the political leadership is expected to provide the Higher Directive and set the overall goals for military operations and Operations Other Than War in political terms. The CCS decides on the use of force. The CCS thereupon authorises the COSC for the use of force and provides directions on the conditions, purpose and any constraints for the use of such force.
- 15. At the operational level, the COSC/SHQ/HQ IDS, will translate the higher directives from the CCS/RM into military outline plans for achieving the military goals within the constraints specified. The Joint Operational Directive of the Chairman COSC to the SHQs would also determine the actions to be undertaken by the land, maritime and air forces in order to achieve the common aim. The planning/directives in respect of the joint conventional operations and special joint operations would be separate; the planning process in both the contingencies would however be the same.
- 16. The SHQ would then allocate the resources based on aforesaid guidelines, and issue directives to the respective Service Command HQs for the conduct of operations. The respective Service Command HQ would plan and coordinate Joint operations through a detailed process of planning and integration process with available/allocated resources.

SECTION VI - NUCLEAR COMMAND AUTHORITY

17. The broad framework of India's Nuclear Doctrine drafted by the





NSAB has laid out our robust C2 structure to ensure our credibility in nuclear deterrence. The framework emphasizes Nuclear weapons shall be tightly controlled and released for use at the highest political level. An effective and survivable C2 with requisite flexibility and responsiveness is in place. The overall C2 structure ensures maximum restraint in employment with an effective interface between civilian and military leaders.

- 18. The NCA is a two layered structure the Political Council (PC) assisted by an Executive Council (EC). The NCA is responsible for thedeployment, control and safety of nuclear assets. Chaired by the Prime Minister, the PC is the only body empowered to take a decision on nuclear issues while the ultimate decision to authorize the use of nuclear weapons rests solely with the PM^{xxiv}. The EC is chaired by the NSA, provides the necessary inputs for effective decision making by the PCand is responsible for executing directives received from the PC. The Service Chiefs are members of the EC. Alternative chains of command for retaliatory strikes exist for all eventualities.
- 19. The Strategic Forces Command (SFC) manages the nuclear arsenal and comprises representatives of the three Services besides civilian staff, experts from Indian Atomic Energy Commission and missile experts from Defence Research and Development Organisation (DRDO). The tri-service SFC, is the NCA's operational arm, having its own Commander-in-Chief reporting to the COSC as well as National Security Advisor (NSA), and controls all of India's nuclear warheads and delivery systems.
- 20. The defining issues for Nuclear C2 is to; maintain a credible deterrence; no first use; civilian authorization; and dispersed arsenal structure to ensure option to retaliate is available^{xxv}.

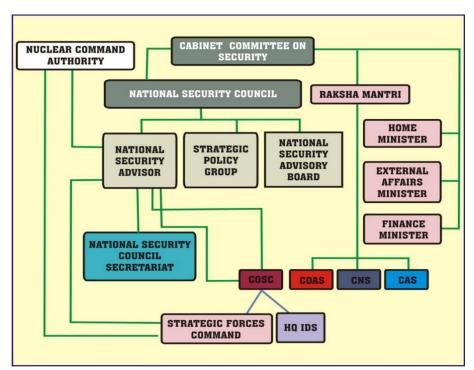
SECTION VII - DIAGRAMMATIC REPRESENTATION – HIGHER DEFENCE ORGANISATION

21. **Higher Defence Organisation**. The Higher Defence Organisation

HIGHER DEFENCE ORGANISATION



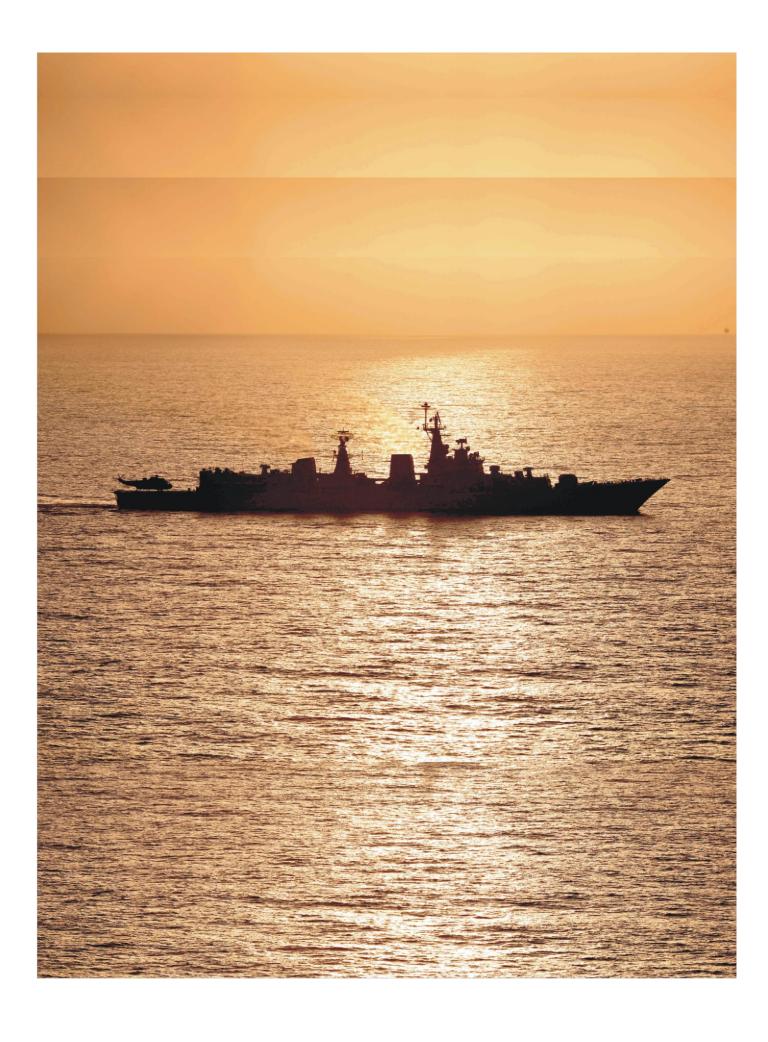
at the National level is diagrammatically represented below :-



CONCLUSION

- 22. Reforms in HDO is an ongoing process and will foster further inter-Service coordination in planning, execution of operations and force planning. The system will intensify faster decision making during crises, and provide a platform for Jointness/Integration of the Armed Forces.
- 23. The shapes and contours of future conflicts have undergone radical metamorphosis and the dynamics of external and internal developments have expanded the epicentres of our Nation's strategic concerns. Therefore, the exercise of shaping the future calls for a blend of continuity and newer innovation. The Higher Defence Organisation C2 therefore will need to continually evolve and adapt to our National Security Aims, Objectives and Interests.





Integrated and Joint Structures

Section I

Understanding Integration and Jointness

Section II

Integration/Joint Operations Structures

Section III

Integrated Planning Structure

Section IV

Integrated Intelligence Structure

Section V

Integrated Training Structure

Section VI

Integrated Logistics Structure

Section VII

Integrated Human Resource Development Structure

Section VIII

Integrated Procurement

Section IX

Integrated Perspective Planning

Section X

Integrated Strategic Structures: Emerging Triad





CHAPTER 5

INTEGRATED AND JOINT STRUCTURES

The Bangladesh war demonstrated that the three Services working closely together were strong and decisive in their actions. Inter-Services cooperation was indeed the most important lesson of that war.

- Air Chief Marshal PC Lal (Retd)

1. Our growing National Security needs require a clear, unifying, and comprehensively evaluated conceptual thought process that is agile to respond to multi-faceted challenges. The continuous and dynamic state of change entrusts upon our structures the need to remain constantly adaptive, optimal and efficient. The limitation of resources and the constant restraint on resource availability entails developing of Joint/Integrated structures. In today's environment, there is an emphasis on cohesive operations as it is a proven best practice in which all Services and organisations, within our country, act in concert, facilitating cross leverage of capacities and fostering greater inter-operability without diluting individual Service/organisational expertise or ethos.

SECTION I - UNDERSTANDING INTEGRATION AND JOINTNESS

Jointness. Jointness implies or denotes possessing an optimised 2. capability to engage in Joint War-Fighting and is not limited to just Joint-War Fighting (Joint Operations). The attention to detail is in the placing of the hyphen. It needs to be clearly understood and discerned that Jointness is a 'Concept', whereas Joint operations are evolutions, of both, Joint operations as well as single-Service operations are sub-sets of the larger whole of 'conceptual Jointness'. Cooperative centralised planning enables appropriate concentration of forces, with the right mix at the right time and place. With Jointness, a high level of cross-domain synergy is attained

and vastly enhances success potential, resulting in maintenance of high morale, camaraderie and spirit. Jointness needs active investment; Commanders need to invest in people, time and resources to develop Jointness amongst personnel of the Armed Forces.





- 3. **Integration**. The more common use of the term 'Integration' in contemporary Military matters is in reference to the integration of 'processes' across all operational domains of land, air, maritime, cyberspace and aerospace, towards optimisation of costsand enhancing readiness. Integration is embodied across all functions; Operations, Intelligence, Technology Management, Perspective Plans, Logistics, Human Resources Development (HRD). It does not imply physical integration. Such embodiment enables common understanding leading to efficient and optimised responses. Beyond the Armed Forces, it also requires collaboration with the Diplomatic, Economic and Information instruments of the National Power, at all levels - strategic, operational and tactical. An Integrated approach comprises, pro-active engagement and shared understanding to bring distinct professional technical and cultural disciplines of entities and sub-entities together; this approach requires structures to be developed to further 'shared understanding'.
- 4. An assessment of Integrated Military Power is enabled through inter-woven structures that are integrated and deployed *viz*, human, institutional and doctrinal. Integrated structures enable optimising resources and outputs; optimising Service expertise collectively through net assessments and doctrinal precepts; build professionalism right man for the job; decentralise command and decision making; and support accountability and responsibility through authority.
- 5. The foregoing necessitates that structures associated with functions like operations, planning, intelligence, training, logistics, human resource development, force structuring and procurement should necessarily be 'Integrated' and 'Joint' in our context. Each function is being dealt with in subsequent Sections.

SECTION II -INTEGRATED/JOINT OPERATION STRUCTURES

6. Our concept of operations is guided by a set of directives issued



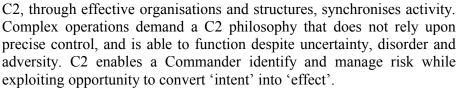
bythe COSC based on the aim(s) of war laid down by the Government. Directions and political end-states are communicated by the CCS to the COSCin form of RM's Operational Directive. These would be converted into attainable Military aims and objectives. Keeping in view the role and mission of each Service, the COSC will plan out an integrated course of action, without losing the uniqueness and special attributes of each Service, to attain the desired end-state. The COSC would decide upon Joint Military Objectives and resource allocation for cross-domain requirements. Course(s) of Action (CoA) will be deliberated upon and best CoA will be jointly decided by the COSC. Decision of COSC will be promulgated as COSC Joint Operational Directive to facilitate Joint Planning.

- 7. For effectiveness of Joint Operations, the concurrent need for a detailed Joint Planning and its efficacy will need to be kept in mind. The key facets of any Military operation are synchronisation and integration of various elements of combat power so that their effects complement and reinforce each other. Conceptually, Joint and Integrated Operations imply enunciation of the 'ways' and 'means' of conducting Integrated and Joint actions with a singular aim of synergising and enhancing the war fighting capability of Joint Service components, so as to achieve a quick and decisive victory with least cost to life and material.
- 8. The Joint Operations Committee (JOCOM) is the integrated structure at strategic level under the COSC to conduct and plan operations. The Joint organisation available at the Service Command HQs, Advance HQ (Air Force), Maritime Air Operations Centre (Air Force), etc will be responsible for the conduct of joint operations at the operational level. Interfaces for Joint operations at the tactical level are the Tactical Air Centers, Ground Liaison Sections and Maritime Element of Air Force.
- 9. The single Service planning process, detailed planning, and execution would continue to be the responsibility of the SHQs, however they will need to be in sync with the broad integrated plan enunciated in the COSC Joint Operational Directive.

SECTION III - INTEGRATED PLANNING STRUCTURE

10. The planning of operations is an essential function of Command.







- 11. In light of the above, it is the Commander who must direct and guide the planning process assisted by his staff. The planning for employment of Joint forces commences with centralised understanding of mission, objective, purpose, intent and the desired end state by each Service. A deliberate, collective and conscious planning process is effected for operations across the spectrum of conflict, for execution during war or in emergency situations during peace.
- 12. The central structure responsible for planning Joint operations is the JOCOM, under the directives of the COSC. COSC initiates the planning process on directives from the CCS/RM. Planning for conventional operations at the Operational Level would involve the Service Command HQs for exercising already worked out contingencies. In case of Special Joint Operations, the COSC issues the Joint Operational Directive to the SHQs or HQ IDS. However the planning process in both the contingencies essentially remains the same and is as follows: -
 - (a) Issue of Joint Operational Directive by COSC to SHQ/HQ IDS.
 - (b) SHQ allocates resources based on COSC directive and own commitments.
 - (c) Command HQ/ C-in-Cs receive directives from SHQ based on COSC Directive along with allocated forces.
 - (d) Inter-Service components work out a Joint plan for contingencies listed in the SHQ directives.
 - (e) Work out plan for Joint operations for all contingencies.
 - (f) Planning process is designed to synergise and enhance capability of war fighting of Joint Service Components.



SECTION IV -INTEGRATED INTELLIGENCESTRUCTURE



- 13. The principal role of intelligence agencies would be similar *viz*, to support National Aims and Objectives. Before the conduct of Joint operations, intelligence collection, collation and dissemination under a central agency assumes greater significance. Tri-Service military intelligence organisation, Defence Intelligence Agency (DIA) synergises the efforts of the intelligence agencies of the three Services. DIA also coordinates with other National agencies involved in gathering external and internal intelligence and provides requisite intelligence support to the Armed Forces.
- 14. The DIA is responsible for providing integrated intelligence inputs on defence issues to the RM, Chairman COSC, Chiefs of Army, Navy and Air Staff, CISC and the NSCS. The roles of DIA are:-
 - (a) Acquire intelligence and prepare integrated analyses and assessments.
 - (b) Manage inter-Service technological intelligence organisations like Defence Image Processing Analysis Centre (DIPAC) and Signal Intelligence.
 - (c) Provide integrated intelligence support for Joint Operations.
 - (d) Provide satellite imagery in support of HADR operations.
- 15. The three Services have their respective intelligence organisations. These organisations collect and collate intelligence required for Service specific operations and disseminate it to Commanders at all levels.
- 16. Coordination with civilian and Para-Military Agencies (PMA) like Research and Analysis Wing, Intelligence Bureau and Intelligence organisations of the Para-Military Forces as part of the Joint Intelligence Committee under the NSA is an imperative to our intelligence function and structure.



SECTION V – INTEGRATED TRAINING STRUCTURE

17. The nature of war demands that the Services fight as an integrated cohesive force. Rapid advances in technology necessitate, forces on land, sea and air to reinforce and complement each other to achieve the objectives set forth. War needs to be conducted in such a manner that the Land, Air and Naval Commanders jointly formulate, orchestrate and implement war plans. In order to fight together they need to train jointly. Hence, there is an essential need to have a, common understanding of military history, doctrines, concepts and contemporary conflict environment; understand each others' Service competence, capabilities, strengths and limitations; constantly improve the control and coordination amongst the elements of the Services at tactical, operational and strategic levels thereby synergising the operational capabilities of each Service to produce a "force multiplier" effect in conduct of

operations across the spectrum of conflict.

- 18. The structures responsible for organising Joint Training are HQ IDS, SHQs, Service Training Commands, Joint and Single Service Training Institutes and Operational Commands of the Services. HQ IDS is responsible for conducting and coordinatingjoint training through the Joint Training Committee (JTC). Joint training without troops is coordinated by Doctrine, Organisation and Training Branch while training with troops to include synthetic/simulated and live training, is coordinated by Operations Branch, HQ IDS. In addition, each SHQ oversees conceptual, directional and functional aspects of training in coordination with their Training Directorates/Training Commands and Operational Commands. For Bi-Service Joint training at theatre level and below, SHQs and field formations establish linkages with each other.
- 19. The Armed Forces Training Institutes (AFTIs) function under the supervision of HQ IDS, while the training institutes of the Service function under the Training Commands/HQ of the respective Service HQ. HQ IDS interacts with all the three Services and their Training Commands for coordination of Joint training. In order to make the best use of existing training institutes managed by individual Services, Joint training is to be conducted at these institutions on the basis of a 'Lead Service' concept.







The COSC decides the lead service for such Joint training concepts and HQ IDS promulgates it. The resource management and administrative cover for such institutes is to be provided by the parent SHQ, while the training curriculum is to be decided through mutual agreement among the Services under the overall policy guidelines laid down by HQ IDS, duly ratified by the JTC. The arrangement should be continuously refined and augmented towards enhancing Joint training, qualitatively and quantitatively.

20. **Joint Training Committee**. The Committee comprises the heads of the training divisions of the three Services under the chairmanship of Deputy Chief of Integrated Defence Staff (Doctrine, Organisation& Training), HQ IDS. This committee examines and recommends policy/executive decisions in respect of Joint training and AFTIs, for the consideration of COSC. All major decisions requiring concurrence of the three Services with respect to joint training are presented to this Committee.

21. Joint Strategic Military Education/Think Tanks.

Indian National Defence University. Indian National Defence University (INDU) is being set up as a fully autonomous institution to be constituted under an Act of Parliament. The aim of INDU is to inculcate and promote coordination and interaction not just among the three Services but also between them and other agencies of the government like civil bureaucracy, PMAs and intelligence agencies. It would develop and propagate higher education in defence studies, defence management, defence technology, acquisition/procurements and promote policy oriented research on all aspects related to National Security. It would impart education to authorities/leadership related with the business of National Security, create synergy between academic community and government functionaries and encourage awareness of National Security issues by reaching out to scholars and the audience beyond the official machinery. The establishment would also be one of the vital links inculcating Joint strategic thinking within the National Security management machinery at all levels.

(b) Centre of Joint Warfare Studies. A Centreof Joint Warfare Studies was established at HQ IDS in the year 2007. The think tank is primarily chartered for conduct of studies and research in joint war-fighting and promotion of Jointmanship amongst the Services, Ministries and other agencies involved in National Security.





SECTION VI - INTEGRATED LOGISTICS STRUCTURE

- 22. Organisational structures need to be based on technology, concepts, transportation, information, and logistics systems. These aspects fundamentally shape the way the Services are supported and sustained during operations. Application of latest technologies reducesbottlenecks that impede fighting forces. Presently, logistics systems of the Services function independently. Formal structures for integrated or Joint logistics are underway and will mature in due course of time.
- 23. The current structure involves the Joint Operational Logistics Committee which is responsible for progressing Joint operational logistic issues with representatives from the Services. The Committee also provides inputs for COSC directives on Joint operational logistics.
- 24. Some of the logistical functions, which are static in nature, are integrated for providing support to the three Services *viz*, Medical Services, Military Engineering Services, Postal Services, Embarkation Headquarters and Canteen Stores Departments. The Army Central Ordnance Depots supply common user items such as ammunition, vehicles, general stores and clothing to the Services. This integrated logistics system has resulted in economy and unity of effort.

SECTION VII - INTEGRATED HUMAN RESOURCE DEVELOPMENT STRUCTURE

25. The Indian Armed Forces provide a distinctive strand in the multi-hued fabric of our Nation through high standards of integrity,





professionalism and excellence. The core strength of the Armed Forces is 'human resource' – the officers, men and women, who exemplify the collective ethos, 'Service Before Self'. The aim of HRD programs (which are sequenced throughout an individual's career) in the Armed Forces are to impart skills and knowledge necessary for each progressive rank and appointment held by the individual. The objective is to prepare officers/men for present and future conflicts'.

- 26. While training institutes do provide training at various stages of career development of an officer, Indian Armed Forces are making considerable headway towardsformalising an integrated HRD structures.
- 27. The personnel of the Indian Armed Forces are its most valuable asset and the main enablers of success in all Military operations. Lessons learnt from history indicate, without exception, that the man behind the machine is more important. Maintenance of morale in the Armed Forces is also vital for the Nation. In an economically flourishing India and a world that is increasingly more transparent and shrunk in time, space and information flow, aspirations of personnel in the Armed Forces, like the Nation at large, need diligent consideration. There is a paramount need to factor this as part of the overall approach to Jointness and Integration in the Armed Forces. To achieve 'Jointness', it is essential that personnel from the three Services serve together in organisations across the military-strategic, operational and tactical levels in command and staff functions. Service by personnel in Joint organisation is an essential enabler to wider understanding of 'Joint' and 'Integrated' philosophy and concepts.
- 28. There is a spirit inherent in the Indian Armed Forces that make its members stand apart. This spirit typically embodies the motivation with which citizens choose to serve in the Armed Forces. The total commitment of Indian Armed Forces, both during peace and war ismarked by military ethos, traditions, ceremonies, and other key intangibles inherent in it. The Indian Armed Forces personnel serve, in unity cohesively to achieve the desired effects in operations. They serve within the legislative, regulatory and societal frameworks of the Nation, fully aligned with values and social expectations of the people and government. An apolitical nature of the Indian Armed Forces is revered by the Nation which often makes it the final bastion in all kinds of crises or adversities.

29. This unflinching devotion of the Indian Armed Forces needs to be preserved by the Nation by recognising – the extra demands of life in the Armed Forces and sacrifices made in defending the Nation's sovereignty.





SECTION VIII - INTEGRATED PROCUREMENT

30. The Defence Acquisition Council (DAC) headed by the RM is the integrated structure to screen and finalise all procurements and acquisitions by the Indian Armed Forces.

SECTION IX – INTEGRATED PERSPECTIVE PLANNING

31. The Armed Forces Long Term Integrated Perspective Plan covers a period of fifteen years. It charts the size and shape of the Forces over that designated time period based on foreseeable strategic trends.

SECTION X - INTEGRATED STRATEGIC STRUCTURES: EMERGING TRIAD

- 32. An overarching role of Information Warfare (including cyberspace), space and special operations in support of modern day military operations at strategic, operational and tactical levels require integrated structures to enable calibration and coordination of operations in these domains.
- 33. The emerging challenges today have added a new 'triad' to the traditional mediums of Land, Sea and Air, wherein future wars are likely to be fought, *viz*in the domains of Space, Cyber and Special Operations. Towards meeting our strategic objectives, initial steps to develop our 'triad' are already underway, with the steps being initiated for establishment of the 'Defence Cyber Agency', 'Defence Space Agency'and 'Special Operations Division'. The synergy from the 'triad' is to enhance our capability, economise expenditure and enable a harmonised,



evaluated and objective Tri-Service advice mechanism.



- 34. Information today is an 'overload' and is critical to all operations; therefore emphasis on cyber including cyberspace and communication is critical, as it is the backbone of all functions today. A comprehensive Cyber force structure drives capabilities in cyber war fighting and wins Network Centric Wars (NCW). Exploiting information technology and Integrated Reconnaissance, Surveillance and Command, Control, Communications, Computers, Information and Intelligence systems will win battles. A survivable secure and alternate means of communication for smooth flow of data and information, effective networking and inter-Service integration, automation and inter-operability is quintessential today. As part of the military's pursuit of capacity building for NCW, the recently launched integrated Defence Communication Network (DCN) will enable all the stake holders to share situational awareness for a faster decision making process.
- 35. Defence Information Assurance and Research Agency is the nodal agency mandated in dealing with all cyber security needs of the Tri-Services and MoD. Cyber defence structures envisage monitoring of own cyberspace at the metadata level, real-time detection of threats in data flow, identifying types and sources of threats and responding suitably to limit and mitigate the adverse impact. The necessary crisis management plans are being incorporated to deal with the potential fallout. The efforts undertaken by various stakeholders are synchronised by NSCS through the National Cyber Coordination Centre under Ministry of Communications and Information Technology. It is entrusted with the responsibility of coordination, identification and mitigation of cyber risks, threats and vulnerabilities.
- 36. The domain of Space, is critical for intelligence, surveillance and reconnaissance, besides navigation and communication. Network centric operations directly depend on this medium due to the dependence on satellite links. The Integrated Space Cell (ISC) at HQ IDS acts as a nodal agency for tri-services on all space related issues. The ISC inculcates inter-operability, identifies Space military applications, imbibe moderntechnologies, training, study vulnerabilities, R & D in Space and interacts with other related sectors. DIPAC, a Tri-Service Organisation processes

satellite imagery and has a data bank to meet the imagery requirements of the Armed Forces.



- 37. Special operations are technologically the least complex of the 'triad'; however, the most complex in execution. As the possibility of a conventional war under a nuclear over-hang recedes with attendant political and international compulsions, training of "Special Operations Division" for execution of precision tasks needs no reiteration.
- 38. The connect in the 'triad' makes integration essential, this flows from the vital necessity of Cyber and Space to 'plan' and the Special Forces to 'conduct' Special operations.



Technological Orchestration and Capability Development

Section I

Approach to Capability Development

Section II

Components of Capability Development

Force Structuring
Force Development







CHAPTER 6

TECH ORCHESTRATION &CAPABILITY DEVELOPMENT

Building capacity dissolves differences. It irons out inequalities.

- Dr Abdul PJ Kalam

- 1. Defence planning is the process of matching futuristic threats and National Security Objectives with Military capabilities and other constituents of National Power. It entails futuristic threat assessment, examination of military options and objectives, careful evaluation of desired military capabilities to counter visualised threats and close monitoring of the entire process throughout, taking corrective actions in accordance with changing situations.
- 2. The fast pace of technological advancement precludes Military modernisation process implying that, a constant endeavour in this direction needs to be sustained to maintain a right balance between obsolescence and new technology. The Military instrument of power is benchmarked by its ability to develop, manage and use technology to maintain a competitive edge over potential adversaries and competitors, thus lending credibility to the National effort in the regional and global arenas. Therefore, defence technology is a strategic resource as well as a force multiplier as it creates a unique competitive space that enables and empowers the Nation in general and the Armed Forces in particular.

SECTION I - APPROACH TO CAPABILITY DEVELOPMENT

3. In our context, the relationship between defence technology and capability is direct. As we graduate from a 'Threat Based' approach of military empowerment towards a more advanced 'Capability Based' approach, we need also to synthesise the requirements of modern technology with the financial backup that technology demands, while keeping the need of indigenisation in mind. Our Nation has certain existing

TECH ORCHESTRATION & CAPABILITY DEVELOPMENT

and well definedthreats emanating from 'State', and 'Non-State Actors' that influence our defence planning process and remain central to our capability planning. Besides, there are threats that are constantly emerging in the dynamic/fluid regional and global security environment. Our capability development, therefore, remains an iterative process between 'threat based' and 'capability based'. However, given our regional and global aspirationsand as the economic muscle of our Nation grows stronger, the shift towards a more 'capability based' process will be an imperative.





- 4. If the above be our strategy, our technology development road map reflects both the stated approaches. The existing and developing technologies, including foreign technologies should enable our Military missions and objectives in the short, medium and long term. Capability development shall entail the following:-
 - (a) Objectively defining, both qualitatively and quantitatively, the Tri-Service capabilities desired at specified points in time in the future.
 - (b) Objectively assessing existing capabilities.
 - (c) Carefully ascertaining the capability deficit *ie* resultant difference between desired and existing capabilities.
 - (d) Evolving long, medium and short term plans to bridge the capability deficit.
 - (e) Constantly monitoring capability development and applying correctives, as and when required.
- 5. Technological and economic forecasts are central to the overall process. Time lines, budget constraints, developmental delays, non-realisation of plans and consequent review strategies must remain constants to the development of a road map. Also factored in the technology development cycle, would be acquisition, training and fielding costs. This comprehensive approach to our technology-capability relationship will enable effective, optimised and deliverable desired capabilities for the current and future battlefields.





SECTION II - COMPONENTS OF CAPABILITY DEVELOPMENT

- The two major components of 'Capability Development' are 'Force Structuring' and 'Force Development'. The process commences with the articulation of laid down desired operational capabilities required by the Armed Forces in the various guidelines on defence like the RM's Operational Directive. Essentially, an effective 'Force Structuring' and 'Force Development' process involves a comprehensive development and analysis of plausible long term military scenarios from which would be derived long term Military Objectives. Military objectives would help articulate the desired military capabilities, which would be region, threat based and time sensitive. This will enable formulation and execution of a Long Term Integrated Perspective Plan. It would also entail appraisal and re-structuring of military organisations at the strategic and operational levels to ensure continued relevance and application of existing military capabilities and those being developed. The essence of 'Force Structuring' and 'Force Development' is to develop desired military capabilities to accomplish military strategic objectives.
- 7. The capability development should not be viewed only from equipment-weapons-technology perspective. Of equal importance are its umbilical cords to the paradigms of policy, doctrine, strategy, training, infrastructure, logistics, efficient management processes, organisational structures etc. Thus the optimum amalgam of all these constituents is, in the real sense, a more holistic perception of military capability.

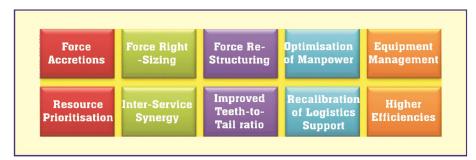
Force Structuring

8. As a component of military capability building/development, Force Structuring, essentially deals with the 'Type', 'Size' and 'Structure' of the Armed Forces. 'Force Structuring' is a long term process which requires keeping pace with the dynamics of the developing strategic environment. It is an evolving process that constantly shifts fromcontemporary to the future requirements. Being a multi-faceted discipline,

TECH ORCHESTRATION & CAPABILITY DEVELOPMENT



it includes some niche subjects, depicted below: -





Force Development

- 9. Modernisation is an important component in our quest to acquire state-of-the-art technologies and weapon systems as well as meet the lifecycle requirements of existing inventories leading to Force Development. It is essential for closing both current and future capability gaps. 'Defence Acquisition / Procurement' is an important component of the quest to acquire higher / more potent capabilities leading to Force Development. Defence Acquisitions/ Procurements could be sourced from within the country (either from the public or private sector) or through tie-ups with foreign entities. Military pacts, inter-governmental agreements *etc* are alternative means to bridge capability/technological deficits by capability sharing and mutual assistance partnerships.
- 10. Striking a balance between indigenisation and foreign purchase is essential to ensure India's military independence and modernisation. DefenceIndigenisation is an imperative for achieving self-reliance; it is related more to manufacturing / production, which ultimately manifests in capacity building. It requires a 'whole of nation' approach, since no industry can survive only on military orders/indents. Therefore, domestic defence manufacturing is a vital component of military modernisation, sustenance and stamina. Not only does it save valuable foreign exchange, it accrues multiple beneficial dividends such as incentivising domesticindustry (both public and private sector), promoting self-reliance, enhancing national pride and creating avenues for defence exports. However, to be meaningful, indigenisation is to be supported by a





and mature R & D infrastructure, a globally competitive domestic industry and a long-term production road-map. Synergy between the MoD, SHQs, DRDO and the industry, both private and public sector will be essential to identify and achieve the desired results towards self-reliance.

DOCTRINE IN PERSPECTIVE

Appendix A (Refers to Para 9 of Chapter 1)



DOCTRINE IN PERSPECTIVE

"The word "doctrine" has originated from the Latin word "doctrina", which implies "a code of beliefs" or "a body of teachings".



- Indian Maritime Doctrine - 2009

Introduction

- 1. Doctrine is a codification of beliefs or a body of teachings or instructions; taught principles in a given branch of knowledge or belief system. Doctrine is not limited to Armed Forces only. It is used in political, religious and other domains as well. Doctrines are enunciated to meet diverse purposes. The enunciation of our Nuclear Doctrine reinforced India's image as a responsible country. There are numerous other examples like Reagan Doctrine of the cold war; Monroe Doctrine, Bush Doctrine, GujralDoctrine and in the military field we have Blitzkrieg, Soviet Deep Battle Doctrine etc.
- 2. Doctrines are generic and basic documents without going too much into specifics. It is a set of proven concepts and principles. Doctrine is not a set of fixed rules or a dogma. Deviations are acceptable but only after a careful consideration and appraisal by the stake-holders. Doctrines at the strategic level are not prescriptive/directive as also do not direct as to how a particular problem is to be solved.

Military Doctrine

3. Military doctrine is a guide to action, rather than hard and fast rules. NATO defines it as the "Fundamental principles by which the military forces guide their actions in support of objectives. It is authoritative but requires judgment in application." Military Doctrine defines the most effective and efficient way of using Military assets on the basis of practical experience. A simple yet succinct and incisive definition which explains this often misunderstood subject is "Military doctrine is what countries believe is the best way to conduct military affairs."





- 4. Doctrine is developed by the Services to suggest a uniform and time tested application of resources. It is neither operations nor tactics. The principal source of doctrine is experience. It resonates the judgment of professional military officers and to lesser extent civilian leaders about what is quintessentially militarily achievable. It captures the lessons of past wars, reflects on the current nature of war and conflict, and takes into account the current and anticipated technological and other changes that will ensure success in future, as well. Military doctrine dwells upon and provides guidelines for the force structuring implying organisation, equipment, training and the methodology of employing force. A Joint Armed Forces Doctrine will coalesce, synthesise and harmonize the tenets, beliefs and principles of the different Services into one common, officially enunciated and accepted guideline for carrying out Joint Operations.
- 5. Military doctrines are shaped by variety of factors *viz*, National goals and policies; threat perception; size of military force; technological threshold etc. It includes the concept of future wars; use of Armed Forces for deterrence and if required to wage wars in pursuitof National Security Objectives; the use of Armed Forces as part of defence diplomacy and in support of foreign policy; and the role within the country. Military doctrine should be seen as the theoretical foundation of the way Military policy is executed.
- 6. Doctrines are constantly evolving; it is a 'work-in-progress and 'updated' from time to time as and when new concepts/structures take shape, receipt of fresh policy directives, advent of new technology, any change in geo-strategic/political environment, demography etc. They are 'progressive tools'. Towards this end, the doctrine development process needs to be sufficiently flexible and dynamic.

Relationship between Concept and Doctrine

7. Concepts and Doctrines are inter-related. Whilst concepts provide a foundation for development of Doctrine, at the same time, the development of concepts is also influenced by existing doctrines, which provide a reference for concept development. Doctrine and Concepts are thus inter-twined and drive each other.



Relationship between Doctrine and Strategy

- 8. The term 'doctrine' and 'strategy' are inter-related but not inter-changeable. "Doctrine" is not "Strategy". Whilst Doctrines provide precepts for development and employment of military power, Strategy is a plan of action for developing and deploying military force so as to achieve National Security Objectivesby the application of force or by coercion. Doctrine shows the 'path to be followed' while executing a chosen strategy. Doctrines form the bedrock of any Military Strategy; Doctrine provides a knowledge base for strategic decisions. However, doctrine is not strategy nor does it control it. They, however run on 'parallel tracks', with feedback loopslinking the parallel tracks between them. The relationship between doctrine and strategy is a mutual one; Doctrine influences strategy (or should influence strategy) and the results of existing strategy either reinforces existing doctrine or initiates the development of new/revised doctrine.
- 9. Doctrines do not evolve on their own; it derives from various sources such as history, nature of threats, political decisions, technology, inter-service relationships, as well as strategy. Without doctrine, strategists would have to make decisions without points of reference or guidance. Doctrine brings awareness and distilled wisdom!







Appendix B

(Refers to Para 4 of Chapter 4)

CIVIL-MILITARY RELATIONS

"Direction in the Civil-Military Relationship in any democracy is strictly the right of the political leadership and not bureaucracy"

- Air Marshal DhirajKukreja (Retd)

SECTION I- UNDERSTANDING CIVIL – MILITARY RELATIONS

- 1. Civil–Military Relations (CMR) describes the relationship between our Civil society as a whole and the Military. More narrowly, it describes the relationship between our Nation's civil authority and the military leadership. The nature of the relationship between our Civilian and Military institutions is distinct and needs to be fostered to ensure mutual trust. Given the critical role played by these two institutions in our Nation's security paradigm, it is essential to ensure that both institutions work seamlessly towards securing our National Interests.
- 2. The functional domain of Civil and Military witness different styles of working. The Military institutions and personnel reflect a conservative yet professional outlook whilst the civil side witnesses a different pace entwined in rules, norms and procedures. The political authority and the civilian bureaucracy should understand the Military ethos and fully grasp the unique challenges of the Military service sothat mutual trust is nourished. Notwithstanding the contrasting rules, norms, values and attitudes, the political control of the military should produce a relationship that is alive to the nuances of use of military power. There has to be a right balance of this unambiguous political control; it is prudent that congruence in the two time-tested institutions exists/is built upon.
- 3. The Higher DefenceOrganisation provides the foundation for the coordination and integration of the various elements of the Government in

pursuit of National Security Objectives. The layered hierarchies of the National Security structures should integrate to get the most out of the expertise available. The inclusivity in policy making drives better understanding; lead by integrated and responsive structural mechanisms drawing on the collective strengths of the bureaucracy, the armed forces, academia, the strategic community and accomplished professionals, all working together to steer National Security discourse towards definite objectives. These integrated systems result in natural checks and balances, ensuring that the final authority always lie unquestionably with the civilian institution *ie*, political authority. Such a system ensures organisational and policy balance.





4. Military professionals are experts in the use of force under the political institution of the State. Apropos, it would always be essential for the civilian authority, in consultation with military (as part of decision making process) to decide the Military Objective and then leave it to the military professionals to decide upon the best way of achieving the objective.

SECTION II - FACETS OF CIVIL - MILITARY RELATIONS

- 5. The Armed Forces are increasingly operating both within and outside the country in a wide spectrum of roles, a requirement which is only going to increase in the years to come. Inter-agency interface forges the vital link between the Military instrument and other instruments of National Power. While operating in an inter-agency environment, it is essential to develop mutual understanding, rapport and respect to achieve the common National Security Objectives. Notwithstanding the common intent, CMR have many facets which are very intricate and complex. These facets need to be synchronised deftly as the sensitivity involved have implications that affect our entire Nation. Some of these facets are discussed in this section.
- 6. **Military Professionalism**. Military professionalism is essentially the process that empowers the military institution executing actions to achieve objectives laid out by the political authority independently, with the ultimate aim of achieving victory.





- 7. **Connecting National Policy and War Fighting**. At the Grand Strategic level, it is essential to understand the translation of national policy directives into war fighting. Understanding this critical translation will resultantly ensure correct application of the Military/Military power.
- 8. **Relationship between Political and Military Leadership.**The relationship is an enduring symbiotic relationship and Parliamentary control over the Military is mandated in the Constitution. A robust/firm political control and a strong military serve the National Interests best. However, to address National Security imperatives, it is prudent that institutional and structural mechanisms exist that facilitate free flowing communication between the two, thereby enabling critical and timely decision making. The functionaries in the MoD ought to be enablers of this relationship
- 9. **Functional Essentials**. National Security discourse impacts not only the larger issues of war and peace but also the strategic decision-making process, nuclear strategy, war fighting capabilities, conventional operational readiness, long term defence& operational planning, procurement processes, morale, and human resource management. It is also aimed at strengthening of international defencecooperation/diplomacy, media interface, psychological warfare, intelligence etc. Allowing these functional essentials to constantly remain inclusive and complementary is an imperative in CMR.

CITATIONS AND REFERENCES

- i. Constitution of India -1950
- ii. Joint Doctrine Indian Armed Forces 2006
- iii. Gurmeet Kanwal, , "India's National Security Strategy in a Nuclear Environment" accessed https://www.idsa-india.org
- iv. Soft Power is a term coined by Joseph Nye to distinguish it from Hard Power in the year 1990
- v. The term "Smart Power" was coined by Suzanne Nossel and Joseph Nye
- vi. Chapter 1; Abridged Report of CNP Scenarios for 2022 by HQ IDS; p5
- vii. Air Marshal Dhiraj Kukreja "Integrated Air Defence for the Indian Air Space "Vol 29.4, Oct Dec 2014
- viii. Cooperative Security simply means that States will work together to solve common problems and is often used synonymously with Collective Security that is, to mean simply that States work collectively together.
- ix. The first use of the term WMD on record is by Cosmo Gordon Lang, Archbishop of Canterbury in 1937, in reference to the bombardment of Guernica, Spain
- x. Dadalos Peace Education: What is Conflict? www.dadlos.org>grundkurs 4>konflict
- xi. Clausewitz on War and Politics www.grose.us > academic > clausewitz
- xii. This item originally appeared in the Australian Army's on-line journal, Directorate of Army Research and Analysis: Newsletter of the Directorate of Army Research and Analysis of the Directorate of Army Research and Analysis, 10 Oct 1996
- xiii. Most Indian Strategists prefer using the term ''National Security Strategy'' instead of "Grand Strategy". We have used the word Grand Strategy because it is widely used in the international fora
- xiv. Concept of Generations in the history of modern warfare was created by a team of United States of America, including William Lind
- xv. Integrated Theatre Battle is a battle where Services participate in a single cohesive format during war/conflict
- xvi. House of Commons Defence Committee "Deterrence in the twenty-first century" Eleventh Report of Session 2013-2014 Vol II, p 5.
- xvii. ibio
- xviii. The definitions/explanations of various concepts in the Section are derived from a study of various publications on the subjects listed in Bibliography
- xix. S Turner, "Mission of the US Navy", Naval War College Review, Mar-Apr 1974; p7
- xx. https://definitions.uslegal.com>sea-denial
- xxi. Ministry of Defence, Government of India website www.mod.nic.in
- xxii. The NITI AYOG is the successor in interest to the Planning Commission
- xxiii. South Asia Defence and Strategic Review Vol 9, Issue 5, Nov–Dec 2015 Interview with Chief of the Naval Staff of the Indian Navy; p12
- xxiv. Manpreet Sethi; Nuclear Strategy India's March towards Credible Deterrence; p
- xxv. Indian Nuclear Doctrine 2003

