# CDS AND BEYOND

Integration of the Indian Armed Forces



Vivek Chadha

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#### VIVEK CHADHA





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## Introduction

At the very outset, this project acknowledges and accepts its imperfection and the incompleteness of the endeavour. Despite the appointment of the CDS and establishment of DMA, the ongoing series of defence reforms are still underway, even as this book is being written. This creates a challenge for evaluating decisions and structural changes that remain in the process of implementation. There is far too much that can still be referred to as work in progress at this stage. In the conventional sense, the resultant book is bound to fall short of the desirable objective – which would be a complete understanding and evaluation of the ongoing defence reforms in India.

Defence reforms are a challenge for most countries, as the case study of the US indicates. These reforms are not a one-time undertaking. Instead, circumstances, evolution in technology, the need to meet newer challenges and limitations observed from past attempts, demand change as a continuum. This is despite the fact that opposition to change is a given, as is its special relevance to hierarchical organisations like the uniformed forces.<sup>1</sup>

The lessons from India's experience suggest that major change has almost always been driven from the very top. In other words, it has been the political elite, who have been the driver for such endeavours.<sup>2</sup> The circumstances of such change may vary over time; however, the co-relation of change with political support has remained an essential and inescapable requirement. Take the example of major force accretion after the 1962 India-China war. Even before the ceasefire had been inked, the process of weapons procurement had begun. This was followed by a substantial increase in the defence budget for the next few years to cater for this initiative.<sup>3</sup> The Indian Army also witnessed an increase in its numbers, which went up from 5.5 lakh to 8.25 lakh.<sup>4</sup> This could not have been possible without the complete backing of the then government.

The second major change took place after the 1971 war, with service-specific committees being formed in 1975.5 In the case of the Indian Army, this was led by General K.V. Krishna Rao and also included the future Chief of Army Staff, General Sundarji. The committee had the backing of the government and this saw revolutionary changes not only in the structuring of the Indian Army, but also its war fighting methodology over the next decade. Ironically, contrary to conventional wisdom, these changes took place in the aftermath of a resounding and the most decisive victory by India over Pakistan in 1971, instead of a defeat. This example suggests that change does not necessarily need to come after a military debacle. Instead, even as things seem perfect on the surface, the need to stay ahead of the curve or overcome a patchy makeshift reality of the past too can lead to change. In this case, as well, the political establishment of the day provided complete financial support for the modernisation of the armed forces, and for the procurement of mechanised forces, which took place in the eighties.<sup>6</sup>

The third attempt remained limited in its scope and implementation after the 1999 Kargil Conflict, despite the 2001 Group of Ministers (GoM) report suggesting far-reaching changes.<sup>7</sup> This endeavour was yet again undertaken after overcoming an initial setback to turn the tables on Pakistan. The observations of the Kargil Review Committee, headed by the renowned strategist K. Subrahmanyam, pointed out the weaknesses in military structures and decision-making procedures.<sup>8</sup> It was a rare public display of introspection, despite the achievements on the battlefield and deft diplomacy. This yet again had the complete support of the government, given the setting up of the Committee immediately after the conflict ended and a follow-up through the GoM of 2001.

In all three previous attempts, even as the government gave the requisite support and where needed additional capital expenditure, it was the senior hierarchy of the armed forces that provided the professional inputs to implement the changes. This was subsequently accompanied by follow-up mechanisms to ensure that changes were incorporated and taken forward to seek eventual fruition. This sequence when co-related with the last few decades will indicate the

reasons for some changes to be implemented, while others remained pending for want of "political consensus" as it was often described.<sup>9</sup> In reality, it was the absence of political will to push such big changes that would unravel the structure of Higher Defence Organisation (HDO) in India. A structure that had remained entrenched over decades on the basis of an obsolete model inherited from British India.

The subject of armed forces integration or for that matter reform of the HDO in India has been discussed and debated for decades.<sup>10</sup> However, as the readers would be aware, negligible movement in this regard since independence had left little to be assessed afresh in terms of options and ideas that had not been analysed threadbare in the past. Contrary to this perspective, the initiative taken by the Bharatiya Janata Party-led National Democratic Alliance Government, headed by Prime Minister Narendra Modi, surprised the naysayers, who had all but given up hope on reforms. The government also went well beyond the wish-list of those who were expecting incremental defence reforms to take place. Instead of a Permanent Chairman of the Chiefs of Staff Committee (COSC), the post of Chief of Defence Staff (CDS) was created. And unlike every conceivable option voiced, the Department of Military Affairs (DMA) came into being. While the time lost in undertaking military reforms in the HDO may not come back, however, the initiatives were the best option for the government to reverse the clock and push for major changes in the defence sphere in India. This opened up the possibility and opportunity to not only take up fresh evaluation of the ongoing changes, but also participate in the debate to constructively feed into the process.

This project was undertaken with a distinct aim. It was not only to evaluate the wider context and concept of defence reforms even as these are underway, but to also provide options to further the ongoing process. This was intended through a detached evaluation of the objective that had been set out by the government in the statement that accompanied the announcement of the appointment of CDS and thereafter the role and responsibilities the appointment would fulfil in its multiple avatars. This spelled

out certain responsibilities clearly, including the duties of CDS, Permanent Chairman COSC and Secretary DMA.<sup>11</sup> The press release announcing the appointment on 24 December 2019, also included the responsibility to create theatre commands as part of the charter of the CDS.

There was a brief reference to the fact that the CDS would not exercise military command. However, this was understandably not accompanied by the nuances of his role in future organisational structures once the theatre commands did come into play. Similarly, the hierarchy beyond the CDS was also not explicitly clear in similar circumstances. This raised as many questions, as it provided answers, regarding the future of defence reforms, its manifestation and how India would create its own home-grown system, even as best practices from elsewhere were available for reference.

This book attempts to evaluate a few critical areas of defence reforms, which are either underway or will be rolled out in the next few years. Despite its imperfection that stems from inadequate information about the stages of reforms that are unfolding, an attempt is made to contribute to the process through discussions around "why" a certain trajectory in defence reforms is needed keeping in mind the operational and structural imperatives that are relevant in the case of India. This has been followed by a brief "how" regarding some of these reforms. However, the "what" has deliberately been avoided as it is considered a logical progression of the first two steps. It was also felt that having got these steps right, the third in the form of the "what" is far easier to implement and is best done by practitioners closer to the realities of emerging structures.

The nature of this study makes its findings time-critical, especially if these rather presumptuously could be considered useful enough inputs for the reform process that is underway. This implies that even if the study was not the most detailed, it was important to make it timely while focusing on the most relevant aspects of the reforms in requisite detail.

Consequently, it was considered important to provide a brief backdrop to the evolution of defence reforms in India, which has been undertaken in the first chapter of the book. It highlights some of the initiatives undertaken in the past, as also the reasons for successive governments not being able to push big-ticket reforms, despite the logic being echoed by multiple committees. And in some cases, the government, despite being in agreement with the principle itself, failed to take the final step.

This is followed by a recall of events that immediately preceded and succeeded the announcement by the Prime Minister to appoint a CDS on 15 August 2019. And more importantly, an evaluation of the charter that has been designated for the appointment, as also its affiliated designations held by the same individual. This includes the Permanent Chairman of the COSC and Secretary DMA. As a follow-up, the changes that this led to in the responsibilities within the MoD are also discussed briefly to provide a better understanding of the roles and responsibilities that have emerged as a result of the new designations and appointments.

There is an attempt to go beyond what came out in the press release to better understand the relationship between various institutions that have been created and their interplays. This includes the office of the Chiefs of the Army, Navy and Air Force. It also delves into the role and responsibility of the COSC. Beyond that, an evaluation of the linkages between the CDS, subordinate and higher officers is also taken up through a critical examination. This is done especially in light of the fact that the responsibilities of the CDS are likely to evolve and expand over time. This will possibly take place with newer structures coming into place and existing ones being redefined. A very important change that could define the civil-military relationship that exists will include the Department of Defence (DoD) led by the Defence Secretary and the office of the Defence Minister itself. While the former will examine fewer areas as compared to the past, the latter will possibly get more involved with the functioning of the armed forces. The ongoing changes should ideally be accompanied by an enlarged office of the Defence Minister to allow an independent assessment of issues.

A case study that has most often been quoted and discussed is that of the US reforms. This is understandable since these reforms were undertaken by a major military power, which is also a democracy. The country had also witnessed repeated attempts prior to the reforms of 1986 eventually implemented through legislation, which became a victim of the interests of specific service groups and organisations within the government. The nature of debate and the struggle for seeking advantage and retaining existing turfs find resonance in India, much like what had happened in the US. In addition, the trajectory of some of the reforms was also similar. This has been captured in a chapter to suggest that the kind of reforms and change that is being envisaged in India is neither new nor is it likely to be any less hotly debated. And this discussion is likely to help achieve a more considered end result. It is also equally important that those responsible for defence reforms in India do not make the same mistakes that have been made and corrected by countries like the US which has a long history of attempts at integration of their armed forces. In some cases, these were not only attempted but also questioned as way back as the Second World War, under conditions that were ideal to test their efficacy. Similar attempts by the US have been tested repeatedly under combat conditions in Iraq, Afghanistan and previously during military engagements with Iran.

There is a school of thought that suggests that given the vast differences between the US and Indian capability, resources and circumstances, such comparisons are futile. This book disagrees with such contention and reinforces the fact that even as operational circumstances are different, principles of integration, joint operations and joint structures remain the same. And there is enough experience that US reforms bring for other countries to seek value, without the need to repeat past mistakes, or duplicate the US processes blindly.

Further, taking on board this critique, where needed, comparisons have been made with the ongoing defence reforms in China. Yet again, it can be argued that China represents a very different environment for such reforms to be conceived and implemented. This is indeed true. However, there are far too many similarities that China has with India in terms of the military structures that are being put in place to discard the ongoing changes out of hand. These similarities include the location of these theatres within the boundaries of the

country. China is also making an attempt to not only integrate the major services, but also functional commands. Further, reforms are being undertaken in China with a simultaneous attempt at net centricity and operationalisation of an informationalised environment. And finally, there is also a focus on cutting down on hierarchy and bringing theatres in closer control of the Communist Party leadership. All these aspects are likely to find resonance in the case of India as well.

One of the most important reform initiatives in the making at present includes the creation of theatre and functional commands. Both these initiatives have witnessed a healthy debate in the public domain. This debate has thrown up multiple variations for these changes to be implemented. The final couple of chapters go into these options, commencing with geographical theatre commands. The discussion includes the number of commands needed, stature of theatre commanders and the imperatives that should ideally drive the change. This debate is critical to the ongoing structural changes taking place. Not only do theatre commands represent the next important level of military change, but these are also likely to become the foundational basis for subsequent constituents to be created and interlinked with these commands. These commands will also form the cutting edge of India's military response to threats and challenges over the next few decades. This makes their constitution and structure one of the most important steps in the ongoing reform process.

The book discusses two commands in a degree of detail. This includes the Air Defence Command and the Logistics Command as part of two separate chapters. These have been envisaged as functional commands, in addition to the theatre commands being created. This analysis does not suggest that the other likely to be created commands are less important. Conversely, since the debate around their raising and structure is likely to be less animated and contested, which includes geographical theatre commands and the Maritime Command, it was felt appropriate to undertake a more deliberate analysis of two of the commands. While the debate continues to take place on the utility and feasibility of an Air Defence Command,

the Logistics Command while having a broad agreement, is likely to present one of the most complex challenges in its execution. It is also likely to remain below the radar as logistics operations often tend to, yet, its implementation will be critical for the overall success of the integration exercise being undertaken by the armed forces.

The Air Defence Command could well become a reality by the time this book is published. Despite this possible reality, the book delves into the need or otherwise of such a command and the options that could be considered while implementing it. The conclusion drawn suggests that it is more important to retain unity of command through the Air Defence Command and theatre commanders for both defensive and offensive air operations, rather than divesting these to different entities. This assessment benefits from a study of the existing air defence system in place, expert views of practitioners on the subject, and case studies from similar restructuring that has been done elsewhere in the recent past.

The second detailed analysis undertaken deals with the Logistics Command. The first building blocks of this structure are in the process of being established and the long-term direction seems to indicate the need for a unified system as the end result. Keeping this in mind, the chapter not only examines the challenges posed by such a move, but also suggests options to reach the ultimate objective of full integration. This is despite the fact that all three services presently function with a reasonable degree of comfort and efficiency on three completely different platforms. However, despite this divergent and independent approach towards logistics management in the past, there is no escaping closer integration in the future.

In order to better understand the desirability and advantages of such a move, case studies from the corporate world have been studied to seek better understanding of how similar initiatives were undertaken despite enormous management challenges. While the armed forces present unique difficulties that relate to unpredictability and disruption as a result of operational conditions, the evolution of supply chain management in the present era has the inherent flexibility of taking such conditions on board. It is also suggested that systems that continue to work on the pull model can shift to

a push model, at least partially to reduce to load on operationally deployed units and thereby improve efficiency.

One of the most critical aspects for the effectiveness of military structures will emerge from the chain of command that eventually evolves as part of the ongoing reform process. A chapter has been devoted to this important aspect. As part of the discussion, different options have been evaluated. The book concludes that the need for faster and more efficient decision making will remain a critical consideration for the eventual decision. However, this ideal condition must simultaneously be weighed against the reality of India's circumstances. The chapter also delves into the role of service chiefs, with new structures coming into place.

Often structures tend to be seen in isolation. However, military and government structures can only achieve optimum effectiveness when their creation is accompanied by strategic guidance from the highest level. In addition, this guidance must become the fountainhead for defence and service-specific doctrines. This has unfortunately not always been the case. And the adverse effects of such systemic limitations have been evident in the past. These aspects are dealt with as part of a chapter, which co-relates doctrinal thought with structural changes.

The key question that the ongoing integration raises is the need to cut costs even as an attempt is made to enhance efficiency. This is difficult to assess from past examples within the military. However, since bringing cost efficiencies is a critical and inherent part of restructuring within the corporate world, case studies from the banking sector, especially since these initiatives have been taken in the recent past in India, provide useful points in this regard. It is clearly evident from these examples that integration can and should cut costs, something that the logistics command can achieve since it has closer co-relation with its corporate entities. It is also in this regard that examples of complex automation challenges and delivery efficiency of companies like Amazon.com are used to co-relate potential changes in the logistics operations for the armed forces.

Three technologies have made a dramatic impact on a number of fields. These are Artificial Intelligence (AI), Blockchain and Bigdata

Analytics. While enhancing efficiency remains a consistent need in organisations, however, these technologies have displayed the potential to create a revolutionary impact on operational efficiency. Therefore, any attempt at restructuring cannot and should not be undertaken without incorporating the best practices that these technological advancements offer. The book highlights some of the advantages specifically in the case of logistics management that can be pursued through the incorporation of these technological advancements while conceptualising and implementing the ongoing changes.

# Setting the Stage for Jointness and CDS

The importance of jointness within the armed forces and the Ministry of Defence (MoD) has been a subject of discussion for a number of years in India.<sup>14</sup> The debate is not peculiar to the Indian security community alone, with similar discussions held in most countries where evolution in defence architecture has taken place.<sup>15</sup>

The ongoing debate in India received an impetus with the announcement of the appointment of Chief of Defence Staff by Prime Minister Narendra Modi, from the ramparts of Red Fort on 15 August 2019. The same was operationalised in a short period of time thereafter, with Gen Bipin Rawat being appointed as the first CDS on 30 December 2019.

The Cabinet approval for the appointment released as a statement by the government provided the broad planning parameters and outline for the appointment.<sup>18</sup> In doing so, it not only charted the responsibilities of the CDS, but also the roadmap for enhancing jointness within the armed forces, with the aim to improve effectiveness and efficiency.

The road towards achieving jointness has at best been chequered, with a number of challenges coming up over a period of time. While there has been consensus on the need for jointness within the armed forces and the government, there was a lack of consensus on the nature and scope of this endeavour, as also on its implementation. This was despite the fact that influential individuals, committees and groups of experts reiterated the need for the same to include Lord Mountbatten as part of his recommendations to Prime Minister Nehru, Kargil Review Committee of 1999, Group of Minister Report of 2001, the Naresh Chandra Committee Report of 2012 and most recently the Shekatkar Committee Report of 2016.

The purpose of this segment is not to outline each successive attempts and initiatives to achieve substantive jointness and in the process seek the appointment of CDS. However, it is useful to document the circumstances under which repeated attempts failed to achieve it. This indicates a sustained logic for the decision to defer it repeatedly. Resultantly, over time, vested interests that opposed the move cemented and all but stymied attempts at arriving at the decision to create the post of CDS.

Lord Mountbatten was the longest-serving CDS in the United Kingdom (UK) from 1959 to 1965. His correspondence indicates that he had suggested the creation of a CDS to Prime Minister Nehru. In a letter to Lt Gen (then Maj Gen) M.L. Chibber, he reveals that the primary reason for not going ahead with the move was the absence of officers of equivalent service in the Air Force and the Navy, when compared to the Army. This meant that a rotational arrangement was not feasible under such circumstances. It was felt by Mountbatten in the early 1960s and prior to the 1962 India-China war that India needed to change the reality of being the only major country without a joint structure at the apex level.

Mountbatten further reveals that even later when Nehru was agreeable to the appointment of CDS, the opposition from Defence Minister Menon scuttled any attempt at implementing it.<sup>20</sup> In this regard, Thimayya emerged as a suitable and agreeable choice for Nehru, though not for Menon. Mountbatten repeated his suggestion again after the 1962 war, yet again failing to convince the Indian establishment.

Anit Mukherjee suggests that Indira Gandhi had overcome past apprehensions and was in favour of appointing Manekshaw as the first CDS. However, given the opposition from Air Chief Marshal P.C. Lal, the proposal was eventually shelved.

The Arun Singh Committee also suggested the creation of CDS as part of its recommendations. Admiral K.K. Nayyar wrote that amongst its main recommendations, was the proposal to create the appointment of CDS, "who would be the permanent chairman, and a Vice Chief of Defence Staff (VCDS) who would be the member secretary."<sup>21</sup>

The debate was pushed centre stage after the Kargil conflict and especially with the Group of Ministers (GoM) of 2000, headed by L.K. Advani, submitting their report in 2001.22 The report clearly and perhaps for the first time in detail went into the role, responsibility and scope of work of the CDS and the VCDS, as also the larger subject of reforms in Higher Defence Organisation (HDO) in India. It suggested the designation of Service Headquarters as Integrated Headquarters instead. It was also recommended that there be decentralisation of financial and decision-making powers to the armed forces. However, the central focus of the report remained the appointment of CDS and its associated architecture.

It was envisaged that the CDS would provide single-point military advice in consultation with the Service Chiefs, even as the latter would have the option to air their views in case these were at variance with those of the CDS. He would also administer the strategic forces. The CDS could bring greater efficiency and effectiveness by ensuring inter-service prioritisation of the defence planning process. This was especially important for deciding on priority for procurement and budgetary allocation. And finally, the CDS was required to ensure the necessary inter-services jointness amongst the services, an aspect that had repeatedly been found to be below par.<sup>23</sup>

There have since been indications that the decision to appoint the CDS came close to being taken, especially by Prime Minister Vajpayee, only to be deferred at the last minute because of lack of consensus.<sup>24</sup> This was despite the fact that the Integrated Defence Staff (IDS) Headquarter had been established, though only with a three-star head and not a CDS.

By the time the Naresh Chandra Task Force (NCTF) was set up, a realisation had begun to set in within the strategic community that the government was unlikely to create the post of CDS. As a result, the Committee recommended appointing a Permanent Chairman of the Chiefs of Staff Committee (COSC) instead.<sup>25</sup> It had possibly hoped to find an interim solution which could push the case for jointness without upsetting the status quo completely, as some sections within the political establishment and services feared.<sup>26</sup>

It was suggested that the limited mandate of the appointment would be restricted to a two-year tenure on rotational basis between the three services. Further, the appointee would be in-charge of the Strategic Forces and Andaman Nicobar Commands. This would also facilitate better coordination in procurement, training and intelligence.<sup>27</sup> However, nothing came of this suggestion as well.

Before commencing with how the debate progressed post-2014, after the BJP-led government came to power, it would be instructive to summarise the efforts at reaching a decision and a consensus prior to that.

The Ministry of Defence, in its submission to the Parliamentary Standing Committee on Defence, said that the Bhartiya Janata Party (BJP) led National Democratic Alliance (NDA) government, which had established a GoM post-Kargil, as referred to earlier, received the recommendations and approved them on 11 May 2001. However, this was with the proviso that the recommendation regarding the appointment of CDS would be taken in consultation with other political parties. Given that the Vajpayee government did not take a decision on the subject, even as other reforms as highlighted above were undertaken, it becomes evident that there were contrarian views probably both from within and outside the government, which led to the decision being deferred.

The process began again, though this time under the Congress-led United Progressive Alliance (UPA) government in March 2006. In a bid to seek political consensus, letters were written to 24 political parties, of which 10 replied. It became clear yet again that the bid to attain consensus had failed.

The indecision of successive governments continued thereafter as well. The NCTF and its watered-down recommendation of appointing a Permanent Chairman of the COSC have been referred to earlier. Consequently, the MoD gave its recommendations to the National Security Council Secretariat (NSCS) as a follow-up of the report. The same, post evaluation was placed before the Cabinet Committee on Security (CCS) on April 29, 2014. On May 14, 2014, the "NSCS vide their letter No. C-182/1/135/2014-NSCS (NGO),

conveyed the approval of the CCS for other recommendations of the Naresh Chandra Task Force (NCTF) pertaining to MoD and requested initiation of necessary action for their implementation."29 The NSCS, however, did not convey any decision on the appointment of the Permanent Chairman COSC.

When the BJP led government came into power in May 2014, there were two proposals open to debate and implementation. While the first related to the appointment of CDS on the lines of the GoM report of 2001, the second was based on the NCTF of 2012. It is also evident that successive governments had by now taken the views of the armed forces and political parties on the subject. It would also be reasonable to assume that the bureaucracy's perspective on the appointment must have also been provided to the leadership, both informally and on file over the years.

By March 2017, there was still no decision by the government on the appointment of CDS. The Standing Committee on Defence in its appraisal of the issue not only appealed for a feedback on the proposed decision, but also reiterated its own perspective on the subject.

The Committee are of the view that in contemporary times, war cannot be fought by any individual Service on its own strength and has to be a multi-service endeavour, in synchronisation with each other. To achieve this goal, permanent CDS, who has the bird's eye view and objectivity may integrate the Services for a common cause better. The Committee desires that CDS should be appointed at the earliest, as he may also be helpful in avoiding duplication in purchase of equipment common to all the three Services and effective functioning of our higher defence organisation in both peace and war.30

By January 2019, a sense of exasperation had begun to set in within the Standing Committee on Defence. In the 46th report, it was opined that given a time-lapse of 12 years after initially seeking political views, a feedback on efforts post-2006 remained absent, which indicated inadequate seriousness on the subject. It also felt that while the absence of a formal approval of the CCS had been conveyed to the Committee, its reasons were not clear.<sup>31</sup>

In addition to repeated reminders from elected representatives of the people in the Parliament, there was consistent clamour within the strategic community for moving forward on defence reforms. This sentiment gained strength when the Modi government in its first term itself commenced its innings with an appeal to the senior hierarchy of the armed forces to push for jointness.

Speaking at the 2014 Combined Commanders Conference, Prime Minister Narendra Modi "called for increased jointness and urged the three wings of the Services to work as a team all the way from the lowest levels of the Services to the top."<sup>32</sup>

By the time the same conference was held in 2015, the Prime Minister indicated his displeasure at structural reforms being slow. He said, "We have been slow to reform the structures of our Armed Forces. We should shorten the tooth-to-tail ratio. And, we should promote jointness across every level of our Armed Forces. We wear different colours, but we serve the same cause and bear the same flag. Jointness at the top is a need that is long overdue." 33

By 2018, the thinking on the subject was drawing closer to a final understanding on the appointment of CDS. Late Manohar Parrikar, the then Defence Minister, said on the sidelines of a graduation parade at the Air Force Academy at Dundigal, "Chairman of the Chiefs of Staff Committee (CoSC) is already there. CDS intends much more than that. The 'first among equal syndrome' does not exist with CDS. CDS also intends to have some linkage with jointness in the three forces."<sup>34</sup> Parrikar indicated the intent of the government to create the appointment of CDS in 2018 itself.

While the announcement did not come in the 2018-19 fiscal, however, it did come the next year on 15 August 2019.<sup>35</sup> Eventually, the debate on the appointment of CDS and the larger issue of jointness partially witnessed a closure. The announcement of the CDS had put into motion substantive integration at the apex level by the government.

Making the announcement, Prime Minister Modi provided greater clarity regarding the expected impact of the appointment

within the purview of national security. He also shared his vision of the emerging circumstances, which made such a decision imperative.

... the world is changing today, the scope of war is changing, the nature of war is changing. It is becoming technology driven; in the circumstances, India too should not have a fragmented approach. Our entire military power will have to work in unison and move forward. Things cannot move smoothly if anyone from the Navy, Army and Air Force is a step ahead from the other two forces, while the other two are lagging behind. All the three should move simultaneously at the same pace. There should be good coordination and it should be relevant with the hope and aspirations of our people. It should be in line with the changing war and security environment in the world and today I want to announce an important decision from Red Fort. The subject experts on the issue have been demanding this for a long time. Today we have decided that we will now have a Chief of Defence Staff- CDS and after formation of this post all the three forces will get effective leadership at the top level. The CDS System is a very important and compelling task in our dream to reform the strategic pace of Hindustan in the world.<sup>36</sup>

In his speech, the Prime Minister made three qualifying arguments in favour of the appointment of CDS. First, he argued that the changing character of warfare demanded and required an appointment which could forge a collective approach to military affairs. Second, he felt that progress in military affairs could best be made through progress on all other aspects of the armed forces simultaneously. And finally, he enlarged the canvas of CDS's role by attributing the responsibility of enhancing India's strategic progression to the appointment.

On the face of it, these three points might seem obvious and a logical follow-up of the idea of creating the post of CDS. However, that is not necessarily the case. In order to examine the importance and relevance of each factor, a brief understanding of the issue is required. It would be appropriate to commence this analysis with the changing character of warfare.

The question that should logically be asked as a result of this repeated reference to the changing character of war and its relation to the need for change in defence structures is: Does the changing character of war necessitate a change in defence structures?

In an interesting co-relation, an article written in 1987 in the *Strategic Analysis* by K. Subrahmanyam, the then Director of IDSA, indicated a similar challenge, though under slightly different circumstances. Citing the context of the 1980s, Subrahmanyam wrote that war could no longer be employed as a continuation of policy. He related it to the rising consciousness amongst the people and the high cost of keeping populated areas under occupation. He further described the period as a stage of coercive diplomacy, "when possession of instrumentalities of force and projection of their image in its intimidatory deterrent and defensive roles have become an inextricable aspect of international relations."<sup>37</sup>

Subrahmanyam in his article attempted to differentiate between the prosecution of war in the past, as part of clearly defined politico-military objectives on one hand and the emerging environment in the eighties on the other. He argued that traditional war fighting conditions gave flexibility of execution to the armed forces. Conversely, in the eighties, when force was required to be employed closely as part of coercive diplomacy, he saw the need for chiefs of staff to be more closely integrated with the government. Subrahmanyam felt that the early years of evolution of structures within the defence establishment led to the creation of Chiefs of Staff from Commanders in Chief. They, instead of being a part of the close group of advisors of the Defence Minister, ended up functioning as the sole commanders of their force. This he felt was similar to the imposition of the structure of the theatre command that the C-in-C's office represented when seen from London. Someone who was required to execute the directions with the requisite pomp, though with no powers or limited influence over policy making and the force structure made available for the task at hand.<sup>38</sup> This he found grossly inadequate for the changing circumstances represented in the eighties, which he described as a time of coercive diplomacy.

Therefore, when the question of need for change in structures of the armed forces in relation to the existing strategic environment is posed, the answer is a "yes". Even though the reasons for long-pending change go beyond the evolving strategic landscape. India's defence structure is a legacy of the British Indian defence establishment, envisaged more than 70 years back, with some of its elements going back even further. There is little doubt that even as the structure has served the country over the years, its inadequacies have been raised and critiqued repeatedly, both by lawmakers and the strategic community alike in favour of the ongoing changes.<sup>39</sup>

This evolving reality has far greater significance today than it had when Subrahmanyam wrote his article. Since then, the evolving character of conflicts has moved further beyond the scope of coercive diplomacy alone, even though it remains equally relevant today. This change has been described in many ways to include Gray Zone conflicts, Unrestricted Warfare, Non-Linear Warfare and Hybrid Warfare, just to name a few. 40

Despite the variations in definitions of these terms, purely for the purpose of the discussion here, the term Hybrid Warfare is being used to illustrate the changing character of conflicts. It is important to reiterate that wars have always been hybrid and therefore to that extent change does not reflect a new form of war fighting. However, it is relevant to reinforce that change primarily emanates from the shifting emphasis on different constituents of warfare.

The case of Pakistan is illustrative in emphasising this shift.<sup>41</sup> Pakistan employed a variety of constituents of Hybrid Warfare to include terrorism, subversion and propaganda in 1947-48 and 1965. However, the most important and decisive component remained conventional warfare in both cases. This shift became evident post-1989 in Kashmir. Thereafter, Pakistan adopted terrorism as the primary tool, with conventional forces playing a supporting role along the Line of Control (LoC). In addition, the toolset was further expanded to include cyber and information warfare. This change was accentuated by the impact of information technology. It assisted countries like Pakistan to increase the pace of dissemination of subversive content, enhance its spread and create a powerful illusion through social media.

Unlike the past, there was no need for declaration of hostilities nor was it apparent through the covert use of military force by the country. There existed a wide space between war and peace. The prosecution of interests in the Gray Zone emerged as a suitable option that was increasingly being exercised. Unlike the past where terrorism was a tool to be employed by the weaker side, this was no longer the case. This was evident through the employment of terrorism by Pakistan against Afghanistan and by Turkey in support of the Islamic State in Iraq. Beyond terrorism, other constituents of Hybrid Warfare were employed by China as an extension of its Three Warfare strategy and Gray Zone conflict. The Russians used its constituents in Crimea and Georgia. The US employed it against Syria and a terrorist organisation like Islamic State used it against state powers in Iraq and Syria.<sup>42</sup>

It is therefore not surprising to find this shift being underlined even in the Indian Army's Land Warfare Doctrine, which states:

Future conflicts will be characterised by operating in a zone of ambiguity where nations are neither at peace nor at war - a 'Grey Zone' which makes our task more complex. Wars will be Hybrid in nature, a blend of conventional and unconventional, with the focus, increasingly shifting to multi-domain Warfare varying from non-contact to contact warfare.<sup>43</sup>

The manifestation of this reality was evident during the 2017 Doklam standoff between India and China.<sup>44</sup> It is equally relevant more recently in 2020 in the area of Ladakh, with China building up infrastructure along the LAC in an attempt to force its version of the LAC on India through coercion.<sup>45</sup> The build-up has been accompanied by references to the 1962 war between the two countries, China's larger resources, size of economy and capabilities and perceived weaknesses on the Indian side.<sup>46</sup> All this remains an attempt to employ psychological means to force one-sided and unilateral interpretations and decisions upon India. The relationship of the actions at play with Chinese actions in Hong Kong, Taiwan, South China Sea disputes and disputes with Japan indicate a recurring playbook that the Chinese leadership has employed. If the reality is apparent from a series of actions discerned on part of China, why is

its military interpretation difficult? Why does the changing character of war trouble policy makers and the larger defence fraternity?

It has often been said that Generals prepare to fight the last war. This may indeed be true in some cases. However, it is equally true for policy planners to also remain in the comfort zone of their beliefs. India's misreading of China prior to the 1962 war is a case in point, wherein till just a few days prior to the war, there existed a firm understanding that China would not take recourse to war.<sup>47</sup>

Those in uniform would probably remember their commanders feeling most comfortable going down two or three steps of the hierarchical ladder for an inspection. This happens primarily because commanders get an opportunity to revisit their past. It re-introduces a functional comfort zone. And this familiarity gives rise to the confidence of repeating past actions under circumstances that are predictable.

This comfort zone can best be understood given that most military commanders tend to spend a major proportion of their professional lives dealing with tactical manoeuvres, which are based on set battle procedures. However, this reality changes when defence planning involves analysing and preparing for a future conflict, which could well be at a dramatic variance with the past. There are few commanders who get tested on their prognosis during their years of military command in conflicts. Most are able to ride the wave of planning based on past precedence. The only time they are tested in the face of changing realities is when the tipping point of peacetime activity is crossed.

This comfort level is also challenged when the changing trends become pervasive and indicate a new normal. That is to say that even as the nature of war remains constant, its character undergoes a perceptible shift. This requires military commanders to adjust to this new normal. The urgency of this reality becomes all the more critical in the face of adversarial military conditions. This not only demands a tactical reaction. In a number of cases, the impact of tactical actions attains strategic implications at the national level. This has been seen in the past along the unsettled borders that India shares with Pakistan and China. The tactical incident at Galwan, which saw a fierce hand to hand fight and serious loss of lives on both sides, undoubtedly had a strategic import on India's stand in relation to the conflict. Arguably, this stand transcended the military domain and had an effect on decisions with a much wider security implication. This included the banning of apps and participation of Chinese companies in the strategic sector. Going further, the possibility of this leading to a shift in India's approach towards security partnerships cannot be ruled out as well. This is the kind of challenge that past structures did not support comprehensively, as was evident previously during the Kargil Conflict as well.

The version of hybrid wars that are being waged provides a very different context for policy planners and military leaders alike. Information was always an integral element of warfighting. However, its employment has been upgraded to make it a constituent of warfare. <sup>50</sup> If the decision to elect a head of state can be influenced through the power of information, then the utility of force becomes a secondary or even a tertiary option for employment. <sup>51</sup> However, is this as important a factor in the strategic manuals of the military brass and policy makers as it is for potential adversaries? Possibly not and that is the change that the prime minister possibly spoke about when he addressed the senior commanders of the armed forces at the Combined Commanders Conference.

The second point made in the lecture dealt with the need to have a combined approach to military challenges and armed forces working against them as a unified entity. On the face of it, this might feel like an obvious statement which is a truism for all organisations. However, the Indian Armed Forces, despite 70 years of independence and a history even prior to that, have remained stubbornly resistant to any form of integration that diluted their respective freedom of action. This led to service-specific training and planning parameters. Further, even operational doctrines remained independent, given their emergence from a service-specific approach to operations. The services employed distinct vocabularies, communication systems, logistics networks and routine functional procedures. This made their ability to operate together a perpetual challenge. It was also evident that in some cases, services saw the

possibility of their influence and the number of senior officers recede with the introduction of unified structures. Rear Admiral Monty Khanna argues:

The Air Force has five C-in-C level billets compared to six of the Army and three of the Navy with area responsibilities. Theaterisation would result in amalgamation of existing commands thereby cutting down their numbers from 14 to possibly four. In this process, while all three services will be impacted, the IAF could emerge with the short end of the stick with the most to lose.<sup>52</sup>

This created an obvious resistance to such moves. Even when studies were carried out, one of the planning parameters remained to keep the number of senior appointments the same, as part of the redeployment.<sup>53</sup> What it seemed to suggest was that structures were important but so were billets. The function was important but so was the form. And when three services became involved in the process of deciding on this function and form, there were bound to be differences of opinion. These differences were based on what the eventual joint structures could potentially achieve; how different were these from service-specific perceptions? Did it fit into the narrow confines of their service-specific telescope? And how would it affect the human resource aspect, of which the number of senior ranks was a critical issue?

Given these set of variables, it does not come as a surprise that the eventual decision to appoint the CDS and the DMA alongside it had little in common with previous recommendations. In fact, it was also dissimilar to the recommendations given by the most recent Naresh Chandra Committee of 2012 that had been appointed to recommend defence reforms.

The conclusion this dissonance seemed to provide to the apex decision making establishment was that inputs would certainly be taken; however, the final decision was more likely to follow conclusions that were derived from dispassionate and independent recommendations. This is a welcome change with regards to decision making related to defence issues. In the past, the competing interests of the services, bureaucracy and contrasting opinions of political parties derailed decision making on more occasions than one. The appointment of the CDS and establishment of DMA comes as a breath of fresh air, wherein, the political establishment is more than willing to take decisions and not get cowed down by "professional" opinion alone. And in all probability, this is likely to remain the guiding principle for the creation of unified commands or theatre commands, as the nomenclature evolves.

The final point made by Prime Minister Modi related specifically to the appointment of the CDS, and expectations related to reforming "the strategic pace" of India. Inherent in this statement was the acceptance that there had been inadequate movement on this front in the past. From the absence of a national strategic or security guidance to reforms within the armed forces. From the armed forces remaining detached from the national security architecture to a disjointed and disconnected approach of the services to national security. The drift of the sentiment was evident. This sentiment was not new. There had been repeated criticism of the government's inability to push defence reforms at the desired pace, especially to include areas of integrating the defence forces into the decision-making structure. It was also felt that India had paid a heavy price for delaying and holding back on the reforms over the years.

Put bluntly, the price of extraordinary civilian control of the military in India is military and strategic inefficiency; India has not struck an optimum balance between control and competence.<sup>54</sup>

The CDS despite not being seen as the operational head was clearly going to become the face of the armed forces within the government. He would also ensure implementation of the government's priorities to include indigenisation, integration and bringing in greater cost efficiency.

The process of formulating the role and responsibility of the CDS commenced after the August 15 speech by the prime minister. A National Security Advisor (NSA) led committee was established to undertake this responsibility.<sup>55</sup> A closer look at the announcement

and the charter of duties assigned to the CDS in his different roles provides a useful indicator of why it is likely to become the pivot for future military reforms within the armed forces. And in future, with the structural process ultimately unfolding, the CDS could also influence the operational orientation of the armed forces in a way no single entity has done in the history of independent India.

## CDS and DMA

The Union Cabinet approved the appointment of CDS on 24 December 2019, and Gen Bipin Rawat was designated as the first incumbent.<sup>56</sup> However, while the appointment of the CDS did not come as a surprise, as mentioned earlier, the establishment of the Department of Military Affairs (DMA) certainly did. It would not be misplaced to suggest that it was completely unexpected step amongst the strategic community. Dr Anit Mukherjee wrote, "The creation of a Department of Military Affairs (DMA), a previously unheard of initiative in India, empowered the CDS in an unprecedented and unexpected manner."57 Mr R. Chandrashekhar, a veteran in the corridors of South Block, wrote summarising the sentiment of a large number of strategic analysts, "This creation of the DMA with the CDS as its ex-officio Secretary had neither been recommended by the GOM in their Report nor announced by the Prime Minister in his I-Day address. Neither has it been suggested by any of the Committee that addressed the subject of integration. From the perspective of the Armed Forces, this is a gracious 'bonus' that has come their way."58

The sentiment is reiterated by the former Chief of Naval Staff Admiral Arun Prakash, who described the DMA and appointment of CDS as "the most significant development in the national security domain since Independence."<sup>59</sup>

The appointment of CDS was not made in isolation. It involved the creation of a three hatted position. The first was the most prominent in the role of the CDS. Simultaneously, though in a different guise, it also included the role of Permanent Chairman of the Chiefs of Staff Committee, which was a separate and isolated recommendation of the Naresh Chandra Task Force (NCTF). And finally, the CDS also wore the hat of Secretary of the DMA. Each appointment brought with it a separate set of responsibilities. The

scope of the change can, therefore, only be understood when each of these is elaborated upon and analysed for its future impact.

The role of the CDS should, be seen in the guise as Secretary Government of India, head of DMA and Permanent Chairman of the COSC all rolled into one. It is also unique in that respect that one individual through these three responsibilities, not only wore three hats, but also exercised powers and authority that span across a wide array of responsibilities. This includes the authority of a Secretary, Government of India at one end of the spectrum and operational advisor to the government at the other. A brief look at the charter of the CDS made it evident that he would not only emerge as the most influential uniformed figure within the Government of India, it was also clear that the impact of his appointment was only going to increase with time, as the void that had existed over decades in the form of military inputs from a single source got filled up through the CDS.

#### CDS as Head of DMA

It would be appropriate at this stage to outline the responsibilities and role of the DMA, prior to attempting an analysis of the same. According to the official press release of the Press Information Bureau, "the following areas will be dealt by the Department of Military Affairs headed by CDS:

- The Armed Forces of the Union, namely, the Army, the Navy and the Air Force.
- Integrated Headquarters of the Ministry of Defence comprising Army Headquarters, Naval Headquarters, Air Headquarters and Defence Staff Headquarters.
- The Territorial Army.
- Works relating to the Army, the Navy and the Air Force.
- Procurement exclusive to the Services except for capital acquisitions, as per prevalent rules and procedures."60

In addition, "the mandate of the Department of Military Affairs will include the following areas:

· Promoting jointness in procurement, training and staffing for

the Services through joint planning and integration of their requirements.

- Facilitation of restructuring of Military Commands for optimal utilisation of resources by bringing about jointness in operations, including through establishment of joint/theatre commands.
- Promoting the use of indigenous equipment by the Services."61

# CDS as Permanent Chairman of Chiefs of Staff Committee

The role of the CDS with the hat of the Permanent Chairman of the Chiefs of Staff Committee included acting as principle military advisor to the Raksha Mantri on tri-service matters, even as the Service Chiefs continued with their advice on service-specific issues. It was felt that the independence of the CDS from the direct command of a service component gave him the unique ability to render unbiased and dispassionate advice. In addition, the CDS would "perform the following functions:

- CDS will administer tri-services organisations. Tri-service agencies/organisations/commands related to Cyber and Space will be under the command of the CDS.
- CDS will be a member of the Defence Acquisition Council chaired by Raksha Mantri and the Defence Planning Committee chaired by the NSA.
- Function as the Military Adviser to the Nuclear Command Authority.
- Bring about jointness in operation, logistics, transport, training, support services, communications, repairs and maintenance, etc., of the three Services, within three years of the first CDS assuming office.
- Ensure optimal utilisation of infrastructure and rationalise it through jointness among the services.
- Implement Five-Year Defence Capital Acquisition Plan (DCAP), and Two-Year roll-on Annual Acquisition Plans (AAP), as a follow up of Integrated Capability Development Plan (ICDP).
- Assign inter-Services prioritisation to capital acquisition proposals based on the anticipated budget.

 Bring about reforms in the functioning of three Services aimed at augmenting combat capabilities of the Armed Forces by reducing wasteful expenditure."<sup>62</sup>

#### Implications of DMA and CDS

An assessment of the role and responsibilities of the CDS as part of the wider charter that has been entrusted to him indicates the direction of reforms that the government has chosen to undertake. Having decided to create closer integration within the MoD, the government had two options. This could have been achieved by adding officers from the armed forces into the erstwhile structure of the MoD or by creating a separate department. A decision was taken to pursue the latter option.

The decision gave the armed forces direct access into the MoD on a similar model as the Department of Defence (DoD). The allocation of responsibilities further ensured that both departments dealt with areas within the scope of their expertise. As part of this bifurcation, the DMA was given responsibilities related to the armed forces as outlined in the Second Schedule to the Government of India (Allocation of Business) Rules 1961, to include the following:<sup>63</sup>

- The Armed Forces of the Union, namely, Army, Navy and Air Force.
- Integrated Headquarters of the Ministry of Defence comprising of Army Headquarters, Naval Headquarters, Air Headquarters and Defence Staff Headquarters.
- The Territorial Army.
- Works relating to Army, Navy and Air Force.
- Procurement was exclusive to the Services except for capital acquisitions, as per prevalent rules and procedures.
- Promoting jointness in procurement, training and staffing for the Services through joint planning and integration of their requirements.
- Facilitation of restructuring of Military Commands for optimal utilisation of resources by bringing about jointness in operations, including through establishment of joint / theatre commands.
- Promoting the use of indigenous equipment by the Services.

However, in a bid to make this structure balanced, through the added advantage of both military expertise and civilian experience in the government, the DMA was created as a joint organisational structure. Resultantly, the "work of 23 sections along with around 160 civilian officers and staff have been transferred from Department of Defence to DMA."

The effective operation of the organisational structure could have far-reaching implications for the success of the changes implemented. For one, it is likely to bring the military hierarchy directly into the decision-making and implementation chain, along with associated accountability and responsibility. While the responsibilities of the DMA still do not include capital procurement, however, in monetary terms, the revenue outlay amounted to Rs 2,18,998 crore for the financial year 2020-21 (excluding defence pensions). For the same year, the capital head with the DoD was 1,18,555 crore.<sup>65</sup> It implies that the responsibility to maintain spares, ammunition reserves and the upkeep of equipment now lies squarely with the DMA and through it the uniformed element of the MoD. Therefore, the armed forces may not be entirely responsible for their modernisation, however, they are now largely responsible for keeping themselves in a battle-worthy state. Even in terms of capital procurement, the initiation and testing of equipment and weapons remain entrusted to the services. With the CDS also being responsible for inter-service prioritisation, the only responsibility with the DoD remained the conduct of the procurement process.

A major limitation of the previous system was the fact that even after being called the Integrated Headquarter, the armed forces were not truly integrated with the apex decision making body in the MoD. This anomaly was finally laid to rest with the establishment of the DMA. The responsibilities and scope of work of the department clearly indicate that the department is approachable to the uniformed fraternity and decision making on service-specific work had been delegated to the armed forces themselves.

Further, by integrating the CDS within the Defence Acquisition Council, Nuclear Command Authority, and as a single point advisor on joint service issues to the Defence Minister, the tenuous links that governed the relationship in the past had been strengthened considerably.

Even as this integration was initiated, for the present, it was ensured that it did not erode the salience and responsibility of the Service Chiefs within their own domains. This was done by not giving command authority to the CDS at present, even though as the Permanent Chairman of the COSC, he is the head of the tri-service decision making body for the coordination of operations. This not only upheld the primary responsibility of the Chiefs of Army, Navy and Air Force, but also simultaneously retained their access on service-specific issues to the Defence Minister.

The balance that was created within the senior armed forces hierarchy, aimed to achieve enhanced jointness. The roadmap for its progression lay in the nature of responsibilities assigned to the CDS and the future course of action that had been designated to him. The appointment of the CDS addressed a longstanding limitation of the erstwhile system, which did not cater for a single point advisor on military matters to the Defence Minister as also the wider national security establishment. The CDS was assigned responsibility of triservice matters. However, simultaneously, the new system kept the option open for the Chiefs to offer advice and the Defence Minister to seek inputs from them on service-specific issues. By ensuring that the CDS did not have command of any particular service assets, possibilities of service-specific bias, as was potentially the case in the past with a rotational Chairman Chiefs of Staff Committee from amongst the three Chiefs, was also removed.

Simultaneously, the designated presence of the CDS at important forums like the Nuclear Command Authority and Acquisition Council further ensured that singular unbiased advice could emerge from the office of the CDS. With the CDS also being given administrative control over the newly established cyber and space agencies, a suitable environment was created to nurture the triservice environment, without competing interests constraining their future growth.

A major challenge regarding capability building in the past emerged from individual services pushing their respective agenda. With a limited understanding of platforms and weapon systems, the erstwhile decision-making authorities in the hierarchy which dealt with the capital budget, found it difficult to prioritise the competing modernisation claims of the services. Even where an understanding did exist, as was the case with the Chairman of the COSC, he did not have the authority to take decisions in the face of opposition from other service Chiefs. With the CDS being given powers to not only arbitrate, but also set the priorities for procurement, there is likely to be greater coherence in laying down the procurement roadmap based on the availability of resources and future capabilities that are planned to be created over a period of time. An indicator of future planning parameters became evident when the CDS clearly indicated that the procurement of new aircrafts is likely to follow a staggered approach.<sup>66</sup>

The CDS was also given the responsibility that related to capacity building aimed at simultaneously facilitating indigenisation of defence manufacture. The 'Make in India' impetus could be assessed when the CDS said, "It is important to hand-hold the domestic industry. Upgrades can come like Mark 1, 2 or 3."<sup>67</sup> The largest domestic manufacturing order from the Tejas Hindustan Aeronautics Limited (HAL) and DRDO venture for 83 LCA Mk 1 for 43,000 crore can be seen in this context.<sup>68</sup>

While the approach to jointness at the apex level remained a concern and is likely to be addressed with the establishment of DMA and the office of the CDS, an equally serious concern was the challenge to better integrate the armed forces themselves. In the past, this was attempted through the office of the Chairman of the COSC, which was a rotational appointment, with the senior-most service chief taking over the mantle of the Chairman. Often this saw the appointment being tenanted for as short a period as a few months, depending upon the residual service of the incumbent after taking over the responsibility. This led to inadequate time to understand the nature of responsibilities and undertake any meaningful initiatives to further the cause of jointness. To make matters worse, decision making within the COSC was based on consensus. This meant that decisions reflected the lowest common denominator of acceptability,

rather than the right decision, even if it was not perceived to be in the individual interest of a single service, keeping in mind the larger interests of defence and security. While this did lead to a series of routine decisions being taken, the ability to force major reforms remained beyond the ability of the senior-most officers of the armed forces, even though the need and urgency dictated its implementation. As a result, the cause of jointness continued to suffer over the years with the focus of the Chiefs remaining sharply on their own services.

The appointment of the CDS as the Permanent Chairman of the COSC changed that. Now he was not only the permanent incumbent of the appointment unlike in the past, he also had the power to "assign inter-services prioritisation to capital acquisitions." <sup>69</sup> This would ensure that not only will there be a joint plan for creating capabilities through acquisitions, deciding priorities for making joint procurements will also improve efficiency. The responsibility for creating an ICDP given to the COSC could assist in coordinating long term capability development plans. The erstwhile inefficiencies as a result of purchasing similar platforms at varying negotiated terms would also be avoided under these circumstances, something that was happening in the past. The case of procuring 28 AH-64E, 22 by the Air Force and six by the Indian Army in two separately negotiated contracts, at substantially different price points is an example of this anomaly and a result of insistence on going it alone for procuring the same weapon system.<sup>70</sup>

The joint utilisation of infrastructure was yet another reason for duplication in the past. This was especially the case with training facilities, which saw similar infrastructure being created, manpower duly trained being posted and maintenance support structures being created. The aviation sector was one such example of comparable facilities being created by each service. The proposal to instead go for joint training infrastructure and facilities would cut redundancies and lead to savings.

A similar challenge related to logistic support for the armed forces. While services do have some specialised and peculiar inventories, however, on the other hand, a number of similar support facilities too had been duplicated in the past. This includes the supply of clothing, small arms, ammunition, fuel and lubricants amongst others. The proposal to create joint logistics structures and facilities coordinated by the COSC could yet again limit duplication. This is clearly evident from some of the initial interviews given by the CDS and the road map laid down for integration.<sup>71</sup>

A lot of these initiatives could now be pushed through as unlike the past, since the Permanent Chairman of the COSC did not have to function on the basis of consensus alone. While consensus could remain a desirable attribute of decision making, however, it is unlikely to become an impediment, as it was in the past. This will speed up decisions, especially at times when difference of opinion amongst the services could have led to unwarranted delays and cost overruns. The Permanent Chairman will, therefore, become the first stage arbitrator amongst the services. He will also be the primary source of informed inputs for the Defence Minister, who could in due course head the second stage of arbitration.

A critical element of defence policy and strategies emanating from the armed forces was the absence of a National Security Strategy. While the process for formulating it was on, as has often emerged in the past, however, it was yet to become a formally adopted document.<sup>72</sup> The formal integration of the CDS both in his role as the Permanent Chairman of the COSC and head of the DMA can become the very catalyst necessary for facilitating an early formulation of such a document. This, as the revamped national security and defence structure suggests, has become even more critical for decision making.

An important element of achieving jointness has remained the past inability of the armed forces to integrate beyond the very basic essentials of jointness. While this included the creation of Headquarter Integrated Defence Staff (IDS), Strategic Forces Command, and the Andaman Nicobar Command, there was little progress thereafter. This was especially true in the case of integration within the MoD, and at the operational level in relation to theatre commands.

As has been discussed earlier, the recent changes successfully created an integration with MoD, with the establishment of the

DMA. That left a void at the operational level of theatre commands. The appointment of the Permanent Chairman of the COSC is likely to facilitate and speed up this integration as well, as was evident from the statements by Gen Rawat during his interviews. Speaking with Sandeep Unnithan of India Today, the CDS said, "We will have theatre commands by 2021-22. Whether you have only western commands or two western commands or two China commands or one China command, will depend on various factors. We are carrying out a complete analysis of these and, then, we will see what resources are needed." Gen Rawat also spoke of the need to create a Peninsular Command, which could possibly have the Indian Navy heading it with the complete Indian Ocean region coming under its area of responsibility. This was subsequently renamed as the Maritime Command.

### How Does the DMA Integrate into the MoD?

After the creation of DMA, the government went ahead and outlined the responsibilities for the department. The responsibilities between the DMA and DoD were outlined as part of the Second Schedule of the Government of India (Allocation of Business) Rules, 1961 as amended on 30 December 2019. This amendment reduced the responsibilities of the DoD and handed them over to the newly created DMA. Details of the same are enclosed in Annexure 1.

There have been concerns raised regarding the appointment of the CDS as a Secretary in the DMA arising from the fact that as Secretary, he would be reporting to the Defence Secretary, who coordinates functions within the MoD.<sup>75</sup> Does this also lower his order of precedence which in the case of Chiefs of the Army, Navy and Air Force stood at 12? How would this compare with Secretaries within the Government of India, who are placed at 23, with the exception of Cabinet Secretary, who ranks higher at 11?<sup>76</sup> These concerns have proved to be misplaced. While all Secretaries of the Government of India are placed at 23 in the order of precedence, it is evident from the functioning of departments that the Defence Secretary coordinates work within the MoD and Foreign Secretary in the MEA. Further, even as the precedence of

Secretary Government of India remains the same, it is abundantly clear that their role and importance can vary more as a result of their de-facto standing rather than merely their precedence. And even if the issue is discussed for argument's sake, the CDS is the first amongst equals even within the four-star group, which includes all the Service Chiefs. Therefore, he enjoys substantial financial and administrative powers of a Secretary and the stature that comes with the appointment of a CDS.

The logic of granting Secretary level powers stems from the fact that there are only two levels at which the requisite financial and administrative powers are granted in the Government of India. While the first is that of the Minister level, which obviously the CDS could not have been designated. The second is the Secretary of a department. Therefore, in accordance with existing procedures, the CDS has been given powers of the latter. This does not have any impact on his status, stature and standing as a four-star general or as CDS with powers and responsibilities that have seen been clarified. Ambassador Sujan R. Chinoy, the Director General of Manohar Parrikar Institute for Defences Studies and Analyses rightly says, "This is the first time in the history of independent India that a uniformed individual will head a government department. The highest form of supervisory mandate that can be delegated to him is at the level of a secretary." 77

The desire to ensure seamless integration of the newly created DMA as part of the MoD was facilitated in good measure by incorporating officers from the civil services within the structure of the DMA. This not only provided the requisite experience of years of functioning within the government structure through them, it also ensured a degree of continuity with the possibility of a longer tenure of the civil services when compared with officers from the armed forces.

It was also helpful to have a recently retired former Chief of a service take over the duties of the CDS. His understanding of contemporary issues of the three services, as also of HQ Integrated Defence Staff, provided him with the ideal platform to undertake future reforms. This was especially the case when these reforms are based on a mandate which is historic and could have a far-reaching impact. Given that the Chief was also the last rotating Chairman of the Chiefs of Staff Committee, the experience provided him with the requisite perspective of tri-services issues as well as procurement procedures and priorities.

Does this arrangement iron out all existing limitations of the past? Perhaps not all. There continue to remain areas which over time may need clearer demarcation in terms of the areas of responsibility of the DMA and DoD. And since this is an evolutionary process, these are likely to be addressed over time. This includes three critical areas of human resource management, operations and procurement. And since the guiding principle for the demarcation of responsibilities was to eliminate dual control over these areas, there is a need for further examination of these to ensure that any grey areas that remain are also eliminated.

Further, it is important to ensure that inputs to the Defence Minister on issues that are dealt with by individual departments and yet having a linkage are presented as a composite perspective rather than isolated ideas. This will allow for a holistic approach to issues that demand actions across departments within the MoD and in a number of cases across ministries.

## **Impact on Civil Military Relations**

One of the issues that have repeatedly come up for discussion, debate and often heated argument in relation to restructuring is civil-military relations. A recent authoritative book on the subject by Anit Mukherjee captures the debate, along with its long and arduous history. Amongst the sentiments that the book highlights, includes the perspective of the military. However, instead of quoting military-strategic experts on the subject, it is perhaps fair to go by the perspective of Stephen Cohen who has closely observed the relationship between the military and other state instruments closely. Mukherjee quotes him as follows:

"... not only does India have civilian control; it has an almost crushing civilian dominance over a very powerful and large military." The military has respected and honoured the sentiment that is one of the pillars of any democracy. And that is of the military remaining subordinate to civilian control. However, the military's resentment regarding the balance between civil-military relations stems from two major factors. First, over time, and perhaps deliberately the status and role of the military leaders in the decision-making circle, have both been diminished. An example quoted with unerring regularity relates to the diminishing position of the Chief of Army Staff in the order of precedence over the years. Similarly, the position of the three services as attached offices, correspondence being moved through a generalist civilian bureaucracy within the MoD and shadow files being used to comment upon notes even by Chiefs, queries being raised on procurement recommendations by the services leading to delays, have repeated surfaced to illustrate the relative insignificance of the military in decision making.

There is both a degree of exaggeration and reality in these assertions. The comparison of service chiefs with the Commander-in-Chief, who was second only to the Viceroy during the colonial period, is superfluous. However, the unwarranted distance at which the service officers were kept for major decisions was certainly a reality that possibly caused irreparable damage to India's efforts at defence preparedness over the years. This reality was made worse by the inter-service rivalry amongst the three services and the tendency to zealously guard respective turfs, irrespective of the wider repercussions of such actions. The limited integration of the services being one of the most obvious fallouts of this tendency.

For most of the period after India's independence when war clouds did not directly have an impact on India's domestic climate, the political leadership preferred to coordinate the actions of the armed forces through their representatives. This apparent lack of interest in matters related to defence was evident from the absence of a national security directive or strategic guidance over decades, despite the constraint repeatedly being flagged by strategic analysts. Feven when a directive did emerge from the MoD, those in the know of these issues were aware that it was a draft sent by the services that had been signed off in the form of a directive. Over time, this had led

to civilian control being translated to bureaucratic control, which became the primary concern of military officers.<sup>80</sup>

On the contrary, in times of crisis, the political leadership did exercise due diligence and remained at the forefront of decision making. Despite these decisions not always bearing desirable results, as was the case during the 1962 India-China war and to an extent during the military intervention in Sri Lanka as Indian Peacekeeping Force, the role and influence of political leaders was evident. Interestingly, it was during these periods that the artificial distance that prevailed during planning and preparations in peace time, all of a sudden got eliminated. And during such crisis situations, the bureaucracy within the MoD played a limited role in the war effort. This was a contrasting situation, which saw a disbalance in influence and responsibility during peace and conflict. A situation that was not ideal for both continuity of policy and prosecution of war.

This peculiarity of the Indian system repeatedly came to the fore. It was evident in 1947, with the political leadership playing a significant role in deciding the scope and extent of military employment.81 Similarly, in 1965, the political leadership remained dominant during the incidents in the Kutch area and the succeeding events that led to the war. The role of Prime Minister Shastri and Defence Minister Y.B. Chavan has been documented adequately in this regard. 82 Similarly, the influence of Prime Minister Indira Gandhi and her decisions that influenced the course of the Indo-Pak war also highlights her role as also that of Defence Minister Jagjivan Ram. This was further evident during the signing of the Indo-Soviet Treaty of Peace, Friendship and Cooperation in 1971, as also throughout the preparatory period of the war and during it.83 India's role in Sri Lanka and the Maldives and also the 1999 Kargil conflict saw a very close association between the political leadership and the armed forces throughout the period of operational deployment.84 And finally, the surgical strike in 2016 and Balakot strike in 2019 yet again reinforced the impact of political decision making at the highest level. And this is exactly how the political hierarchy should have been involved in critical decisions related to India's national security. However, the anomaly existed as a result of this involvement largely remaining pronounced during crisis situations rather than during the preparatory period in between such conditions.

The resultant challenge could be resolved through two possible options. One, the armed forces could be made part of the decision-making loop and integrated into the MoD. This would bring them within the decision-making loop and in proximity of the political leadership. And two, there was a need to establish a system, which could facilitate a direct linkage between the professional military leadership and their political leaders.

The reforms that were undertaken in 2019 attempted to achieve both these parameters. It aimed to correct the civil-military dissonance that had continued to afflict the system over the past few decades. Additionally, the military hierarchy now got direct access to the political leadership on military matters, and the establishment of the DMA brought a number of uniformed military men within the ambit of the MoD. As a result, issues related to military matters that included the three services, promotions and postings of officers, now found military officers as the dealing staff. However, there continues to exist a disconnect with the broader aspect of defence policy. According to the distribution of work, this remained the responsibility of DoD. While this is in order, however, the lack of civil-military integration within the DoD, as has been implemented within the DMA, remained a limitation for providing holistic inputs, which could ideally be derived from a combination of both civilian and uniformed staff. As a result, it could limit the scope of deliberations at the level of the Defence Minister on policy matters.

The concerns regarding limited relevance of the armed forces within the decision-making system, also received an impetus as a result of the changes that took place. The changes corrected the disbalance that existed within the civil-military relationship. There is little denying the powers that come with certain levels within the government. This includes financial as well as administrative actions. However, despite this reality, all appointments at the same level do not wield similar influence. This is not only true for Secretary, but other positions as well. There is a reason why certain secretary posts are considered more important than the others,

despite all of them having the same status. Similarly, it would be short-sighted to merely go by the order of precedence of the CDS in the hierarchy. It is far more important to assess his relevance and his ability to positively influence defence related decisions, given the expertise and experience he brings into the system. His ability to prioritise capability development decisions involve a major aspect of national security policy. The DMA gets financial powers of the kind which were never available in the past, giving the CDS a say on implementation of decisions.

The appointment of CDS may not have led to a major change in hierarchy, or added to the de-jure powers of uniformed officers. However, more importantly, it significantly shifted the balance in the de-facto ability of the CDS to influence decision-making. And that is likely to be a more important element of civil-military relations in India, rather than a document that describes the inter-se precedence of appointments.

There is yet another side to civil-military relations that tends to get neglected. And this is the undeniable influence of the uniformed corps on decisions related to defence and security. The importance of professional inputs by the military brass is undeniable. However, it is equally important that this input receives due diligence prior to long term conclusions being drawn. The structure of the MoD did not have the requisite capacity to undertake this informed and independent analysis. In fact, one of the limitations of the new structure that has been established may also suffer from a similar limitation. While the military leadership has been made a part of the decision-making cycle within the MoD, however, by dividing the roles of the DMA and DoD into two water tight compartments, cross-validation of policy decisions remains as stove-piped as earlier. The only exception to this constraint is the placement of civilian bureaucracy within the DMA, though a similar cross-posting of senior military officers over and above those who were already posted within the DoD remains absent.

The existing organisational setup could lead to a situation where the DMA will provide inputs for the Raksha Mantri on military strategy while the DoD will give defence policy guidelines.

And there is no provision for these to be enmeshed as is obviously the requirement. What remains absent is the requisite staff with the Raksha Mantri, who can validate perspectives emerging from both departments and integrate them into a cohesive whole. This limitation is likely to come to the fore with other issues related to defence production, research and development and policy initiatives like Aatmanirbhar Bharat. The vision and validation needed at the MoD to harmonise these efforts demands staff for providing inputs and coordinating the efforts of the government.

Is there a case therefore for the CDS and the Defence Secretary to have a common charter on some issues like defence policy and capability development, which does need the joint attention of both heads of their respective departments? A study of the Australian and British model of Higher Defence Management indicated a similar dilemma, which was overcome by creating a degree of joint functioning between the two appointments. Rajneesh Singh writes, "The two appointments (CDS and Defence Secretary) will be jointly responsible for strategic assessment, long-term capability planning and liaison with other departments on security matters." 85

In the absence of such a joint decision-making system, with an added limitation of the RM's office not being equipped with the capacity to conduct independent scrutiny of proposals and perspectives, the challenges become evident. This could lead to validation being done by the National Security Council Secretariat, which should ideally be associated with wider issues of security.

# Events Leading to Defence Reforms in the United States and its Comparison with India

Before making a more detailed analysis of the transformational structural shift within the Indian defence establishment, it would be useful to analyse if similar actions were initiated in the past on the basis of changing trends or inefficiencies observed. And this is not only relevant for restructuring and operations in the Indian context, but also for armed forces widely considered technically more advanced and with a wide-ranging international exposure to operations, like the defence forces of the United States. Despite the more varied experience and exposure in case of the US, the circumstances leading to the enactment of the US Goldwater Nichols Act were not very different from the experience of the Indian Armed Forces deployed for Operation Pawan in Sri Lanka and in the Maldives to defeat a coup attempt.<sup>86</sup>

In 1980, the US armed forces launched a rescue mission to free 53 American hostages, held in Tehran in the aftermath of the 1979 uprising in that country. If one were to provide a brief conclusion of the series of events that transpired in relation to the rescue attempt, it can be concluded as an abject failure. Six of the eight helicopters arrived at the rendezvous called Desert One. When a third helicopter developed mechanical problems, it was realised that the mission could not be undertaken with the existing lift capacity. Having aborted the task, on the way out, one helicopter hit a C-130 aeroplane. A total of eight members of the mission died in the series of events, the team was forced to leave equipment, weapons and documents and all this happened without making contact with the enemy!<sup>87</sup>

A detailed assessment of the incidents indicated that the primary reason for the mission failure was "the ad-hoc nature of the organisation and planning".<sup>88</sup> An assessment of events made it evident that the absence of a joint mechanism to plan and implement

the operation, the weaknesses of the existing Joint Chiefs of Staff structure and the single service approach was undertaken by each service, resulted in the kind of ad-hoc functioning, which saw one of the most embarrassing failures of US operations.

The disaster not only caused embarrassment to the armed forces within the US, it also created serious doubts regarding the efficacy and effectiveness of US capabilities, despite the country being seen as a military and economic superpower, which had the very best at its disposal for implementing its mandate. The failure of the services to work and operate together emerged as the biggest challenge for the US government in its bid to remain a potent and effective military power.

The disaster immediately raised doubts about US military capabilities and the state of readiness of the armed forces – the seeming ineptness of the operation stood in stark contrast with successful rescue operations conducted with little loss of life by the Israelis at Entebbe and by the West Germans at Mogadishu. To some analysts and journalists, the episode demonstrated that the Defense Department was incapable of mounting a combined assault, especially in the distant territory.<sup>89</sup>

The emphasis on service representation rather than the achievement of cohesion during the operation was reinforced by the National Security Advisor Zbigniew Brzezinski as well during his testimony to the Senate Armed Forces Committee.<sup>90</sup>

In 1983, the US armed forces conducted yet another mission called Operation Urgent Fury. This required them to rescue American citizens after a coup in Grenada. While the operation did succeed in its larger mission, it was not uneventful. In fact, the challenges of coordination and implementation again raised the inadequacies of the existing structural and procedural inadequacies of the US defence department and its ability to smoothly conduct joint operations with multiple entities.

The absence of a Joint Task Force Headquarter, the inability of the land forces to communicate with the Navy and repeated failure in communications severely affected the efficiency of the operation. "Because of incompatible radios, Navy ships within sight of Rangers and airborne troops could not initially receive or respond to their requests for fire support. On two occasions, when the Navy did respond, they attacked the wrong targets."<sup>91</sup>

The inability of different arms and services to operate together, yet again emerged as a serious challenge for the US in its bid to employ force as an instrument of national interest.

In 1983 itself, the US armed forces faced one of the most devastating setbacks in a single attack against its forces. The bombing of US Marine barracks led to the death of 241 soldiers. Amongst other reasons ascribed to the incident, was the challenge of command and control of the unified commander of the European Command, who lamented his inability to effectively command the troops from different organisations under him in the operational theatre.

It becomes evident from the three incidents that despite having the necessary resources and capacity, the US repeatedly failed to translate it into the requisite capability when it was tested under operational conditions. This suggested that good PowerPoint presentations could make an organisation look effective, but the reality of its effectiveness only becomes evident when it is tested in battle or under challenging conditions. And yet again, when the threat demanded employment of a joint organisation to operate seamlessly, the parameters of success become very different, as the three examples of US learning proved.

In a sense, these operational shortcomings became the backdrop for elected representatives of the people to push for jointness in the US defence forces and government. It was felt that the existing shortcomings within the US system prevented the Department of Defense "from prosecuting joint operations successfully. In particular, issues with the operational chain of command, the quality of military advice given to civilian leaders, and the dominance of the services within the Department of Defense at the expense of joint requirements were all areas that Congress believed needed significant improvement."<sup>92</sup>

A series of incidents of the kind described above-led senators to push for jointness within the armed forces. It had become clear to them, at least to some of them, that the debilitating impact of single service focus was largely responsible for operational weaknesses that had come to the fore over time. As a result, the push for reforms came from the elected representatives of the people. A review of the existing defence structures and responsibilities was undertaken by the House and Senate Armed Forces Committees. The Committees concluded that existing structures served the interests of individual services more than the larger aim of the defence of the country.<sup>93</sup>

Some of the specific limitations noted at the time of implementing the Act seem to echo the challenges faced by the Indian Government and more specifically the Ministry of Defence (MoD). In the case of the United States, the functional limitations in addition to the operational challenges listed earlier included "dual-hatting" of the service chiefs who were not only statutory members of the Joint Chiefs of Staff (JCS), but were also responsible for ensuring the interests of their respective services. It does not come as a surprise that this led to a conflict of interest for the respective service chiefs. The advice rendered by the JCS to the President and Defence Secretary also suffered from a similar problem. Given that the service chiefs were a part of it, any dissent or disagreement practically led to a veto on joint decision making. Needless to say, this was a drag on not only decision making, but also on tough decisions that became difficult to take. The Chairman of the JCS did not have a number two, nor did he have the requisite staff to undertake procedural assessment. This was in contrast with the elaborate staff of the services, which gave them the ability to analyse proposals and argue their cases.94

These were some of the limitations that the Goldwater-Nichols Act attempted to overcome. The Indian Chairman Chiefs of Staff organisation had very similar limitations, which allowed the respective Chiefs to veto joint proposals. In addition, not only were the Chiefs dual-hatted, more importantly, so was the Chairman. In the Indian case, he happened to be one of the service chiefs. Consequently, there was little doubt that the advice emanating

from this organisational setup was below par and suffered from the lowest common denominator impact. In addition, while HQ IDS did have certain capacities, however, these are likely to fall short of the envisaged requirements of the enhanced role of the CDS in the future. This, much like the US experience, will be in contrast with the capacities which exist with each respective service.

As a comparison, it would be useful to analyse the focus of the Goldwater-Nichols Act, especially given the similarity of challenges faced by the two countries. It included:95

- 1. To recognise the Department of Defense and strengthen civilian authority in the Department;
- 2. To improve the military advice provided to the President, the National Security Council, and the Secretary of Defense;
- 3. To place clear responsibility on the commanders of the unified and specified commands for the accomplishment of missions assigned to those commands;
- 4. To ensure that the authority of the commanders of the unified and specified combatant commands is fully commensurate with the responsibility of those commanders for the accomplishment of missions assigned to their commands;
- 5. To increase attention to the formulation of strategy and to contingency planning;
- 6. To provide for more efficient use of defence resources;
- 7. To improve joint officer management policies; and
- 8. Otherwise to enhance the effectiveness of military operations and improve the management and administration of the Department of Defense.

Without going deeper into the Goldwater-Nichols Act of 1986 in the US, at this stage, it would be useful to compare the motivations for bringing about a change in India's Higher Defence Organisation (HDO) with those in the US in the eighties.

## Comparison of Defence Reforms in the US with India

HDO reforms in the US and India were both motivated by the requirement to bring in greater efficiency and effectiveness. A need was felt to enhance jointness, thereby making the defence architecture more resource-efficient. However, despite these common ends that both setups wanted to achieve, the motivation for the same was different. This, therefore, had an impact on how both countries went about implementing their reforms.

This factor is important since comparisons between the two systems may be useful and even relevant to a large extent, however, there are distinct differences which guided the initial announcement of the decision in India. It is also likely to influence the future course of the implementation, which is underway.

Unlike the US where a need was felt to strengthen civilian authority vis-à-vis the armed forces, in India the narrative that had dominated the debate was the opposite. Repeated arguments were made in favour of strengthening the role of armed forces within the MoD and therefore as part of the larger decision-making authority within the government of India.

The Kargil Review Committee Report had noted that "India is perhaps the only major democracy where the Armed Forces Headquarters are outside the apex governmental structure." This observation has been repeated and reinforced by a number of strategic analysts, especially those from the uniformed fraternity. Admiral Arun Prakash said that the decision to make the armed forces "attached offices" reduced them to "adjuncts of MoD," thereby placing them outside the Ministry. He added, "Having submitted a case on file all that the SHQ could do was to wait like a supplicant for the wheels of MoD to grind at their leisurely pace, while targets and deadlines slipped, steadily but surely."

This criticism related to the outlier status of the armed forces, with their inability to adequately influence decision making within the governmental structures. This happened at two levels. First, as attached offices, when proposals were sent by the armed forces, these could be commented upon by the bureaucratic hierarchy adversely, often leading to its dilution or rejection. This was especially the case since the proposal files were discussed with the political leadership by this bureaucracy, without an equal role for the armed forces, which initiated the proposal.

The impact of procedural delays was felt all the more on proposals with financial implications. And most on defence procurement, which had a direct bearing on the capacity building effort of the armed forces. Prakash wrote: "Queries are sequential, repetitive and often raised to prevaricate; and every movement takes weeks, if not months. Adherence to these processes has not only thwarted force modernisation, in spite of recent reforms in procurement procedures, but also affected combat readiness."98

He further argued that limited budgetary allocations, competing demands of the three services and a generalist bureaucracy incapable of prioritising the demands made beyond allocated budgets, led to delays ranging from 5-15 years adversely affecting modernisation attempts.

The argument was further reinforced by contentions that questioned the fundamental meaning of civilian control. It was argued that the essence of the term civilian control meant political control. However, over time this has been converted to bureaucratic control. Srinath Raghavan observed that the lack of integration of the armed forces with the MoD had led to a perception within the military that "political control has given way to bureaucratic control". He added that this problem is not of recent origin, having been flagged by a Study Team on Defence Matters setup by the first Administrative Reforms Commission of 1966. The report observed that "there was some misapprehension that civilian control amounted to 'civil service control'.99

Suggestions to integrate the services with the MoD were not implemented despite its repeated articulation. Prakash felt that it served the interests of the bureaucracy, which saw their role as fundamental to retaining civilian control over the armed forces. 100 The suggestion to cross-post officers was also rejected on the premise that the services would depute officers of low calibre to the MoD. Similarly, the creation of a specialist cadre for the MoD, a suggestion again offered repeatedly, was rejected.

However, the desire for status quo was not only related to opposition from the bureaucracy to integration of the armed forces with the MoD, including the appointment of CDS. It has been allowed to fester for a number of years by different voices and interests. There is little doubt that all previous attempts to build political consensus on the issue did not succeed, with some political parties not keen on creating a CDS. Besides political parties, at different stages, opposition came also from the armed forces themselves.<sup>101</sup> While heads of all three services voiced contradictory opinions, the Air Force remained most consistent in its opposition of appointing the CDS without adequate spadework as also the creation of theatre commands.<sup>102</sup>

Therefore, even as the principle of integrating the armed forces into the government more closely was largely agreed to with a view of making them a part of decision-making process, competing interests of various actors ranging from political parties, bureaucracy and the armed forces could not come to a consensus regarding the manner, pace and scope of integration.

This paved the way for exactly the same culmination process to the fractured debate on reforms in the defence sector in India as had been the case with the US. The only difference was that instead of the Senate taking up the mantle of pushing for reforms as in the US, in India, it was clearly a process spearheaded at the highest level of government by Prime Minister Narendra Modi. His attempt at creating a consensus right through the first term in office did not bear the desired results. Consequently, he drove the reforms, as had been suggested by a number of strategic analysts from the top. As a result, the reforms went beyond the recommendations of the committee that had been constituted to suggest the mandate of the CDS and included the Department of Military Affairs as well. <sup>103</sup>

The US experience has clearly indicated that defence reforms of the kind undertaken after the Goldwater-Nichols Act did not remain cast in stone. Changes have continued since to adapt structures to evolving situations and create additional organisations to meet fresh challenges. India would do well to keep this experience in mind. The structures that will eventually come into place will change and evolve over time. It is also possible that the experience of implementation will throw up practical constraints which will further demand change. It is best to remain open to such ideas and options.

As an illustration, the US Cyber Command was established as a Sub-Unified Command in 2010. However, in 2018, it became a unified command.<sup>104</sup> In addition, its role and scope of work also underwent evolution. What began as an organisation oriented towards defensive measures, underwent a shift to become an offensive force.

Besides the Cyber Command, a number of other geographical combatant commands and functional combat commands have undergone changes over the years, which includes the Space Command and Strategic Command.

In addition, the US Congress also undertook a formal review on completion of 30 years of the Goldwater-Nichols Act in 2016. However, even as the need for reforms has been emphasised, consensus regarding the nature of reforms has remained elusive. Some of the areas for evaluation that have been raised include the defence acquisition process, strengthening of Joint Staff, reduction of staff within the Pentagon and strengthening services in joint roles. 105 The need for change was highlighted by Secretary of Defense Ashton Carter in March 2016 when he said, "Today's security environment is dramatically different - and more diverse and complex in the scope of its challenges - than the one we've been engaged with for the last 25 years, and it requires new ways of thinking and new ways of acting."106

This statement and the very process of re-evaluation of the reforms undertaken by the US suggests that despite iterative changes over the years, it was felt appropriate to undertake a holistic evaluation of the previous reforms in its entirety.

The nature of debate that took place in the US was not very different from the discussions on defence reforms in India. The issues that were highlighted in the US not only included the changing character of challenges being faced, but also constraints like ageing military equipment profile, reduction in the size of the Navy, increasing outlay on manpower costs and overhead expenditure. The Congressional Research report quoted concerns from as early as 2010, which suggested that "the ageing of the inventories and equipment used by the services, the decline of the size of the Navy, escalating personnel entitlements, overhead and procurement costs, and the growing stress on the force means that a train wreck is coming in the areas of personnel, acquisition and force structure."<sup>107</sup>

Despite some analysts reinforcing the good work done by the US Department of Defense (DoD), enough questions were raised regarding the very fundamental objectives that the DoD had failed to achieve, despite a generous budget over the years. This included the inability to achieve a desirable political outcome in Iraq and Afghanistan despite tactical and operational successes. The poor state of military platforms despite the large defence budget outlay. The failure of the DoD to come up with strategies that adapt to the changing strategic landscape. And the ability to plan on future capability development while addressing current challenges. <sup>108</sup>

The criticism did not end here and came from some of those who had remained at the helm of affairs within the DoD. Robert Gates expressed his anguish at the functioning of the Pentagon with regard to the bureaucratic hurdles that had been created for field commanders. This according to him impeded decision-making and delayed procurement decisions for fundamental equipment that could be lifesaving, like mine-protected vehicles.<sup>109</sup>

Has the debate been grossly different in the case of India? Not entirely. Successive parliamentary committees have underscored the poor state of military equipment. The dwindling state of air force squadrons has remained a cause for concern. The navy has not been able to expand according to its planned timeline. This has been accompanied by an increase in manpower costs, raising the percentage of revenue expenditure over the years.

Clearly, the need for a holistic analysis remains as relevant for the US as it is for India. The backdrop of this reality makes the decision to undertake defence reforms by the government that much more pertinent under the prevailing circumstances. And the ongoing reforms need to go much beyond restructuring and improving the procurement procedures. It demands an appraisal of the planning and implementation systems, which make structures achieve the effectiveness that they are designed to have.

The comparison between the US and Indian defence reforms provides enough areas of intersection and co-relation for important lessons to be drawn – especially for India. This chapter is summarised through five of the most important factors that emerge from the evaluation.

The US experience suggests that the creation of joint structures will remain an exercise in futility if these are not empowered in terms of the resources to plan and execute operational tasks, the authority to exercise command and control and finally the responsibility to take the blame or accolades for the results of a task that comes their way. There has to be a clear chain of command once a joint structure has been created.

It is understandable to find an iterative approach to the implementation of defence reforms. However, this must be a part of a roadmap which retains the terminal objective of the reforms in mind. It is better to not undertake partial reforms and find nascent and incomplete structures failing under operational stress, rather than retaining an imperfect yet tested structure.

Defence structural reforms are like the hardware of a technological system. It may well be created with the best individual components that can be put together. However, unless these components are harnessed by an efficient operating system and software for specific roles, the hardware will fail to function to its potential. Worse, it can also fail in even the minimum desirable role. The ongoing structural reforms are this hardware. However, the ability to integrate the requisite planning processes and changes in organisational culture will become critical for the success of the newly created structures.

The creation of joint structures does not subsume the role and importance of individual services. The services will continue to provide the heavy-lift capability that new structures must undertake. Past experiences have repeatedly indicated the challenges associated with a disbalance between joint structures and individual services. While this fine balancing act will take time to perfect, however, past experiences are invaluable to understand the fundamental guidelines that must be followed for achieving the end result.

The US example also suggests that the individuals no matter how efficient cannot deliver considered inputs without the requisite support staff. HQ Integrated Defence Staff was created at a time when the CDS was not in place. Since then, the role and responsibility of the CDS demand more resources and their readjustment to ensure that the desirable capabilities can be developed over time.

Finally, the ongoing restructuring is not merely a military exercise. While taking the step of reforming the higher defence organisation, the planners have also placed additional demands on the political establishment to take a more involved and direct role in decision making on a regular basis. Since the system that is coming into place has similarities with other defence setups, it is also bound to demand a similar role and involvement of decision-makers over time. This will spell a perceptibly varied organisational culture for military decision making. And it is time for relevant practices and procedures to be put in place to ensure optimal functionality of the systems that will come into force in the future.

# Theatre Commands Concept, Structure and Implementation

One of the core constituents of the government's initiative aimed at enhancing jointness and bringing greater integration was the establishment of theatre commands. The importance of this structure can be seen from the outline of responsibilities of the Chief of Defence (CDS). This clearly included the creation of theatre commands over a period of three years.<sup>113</sup>

The enormity of this task can be gauged from the fact that there had been limited consensus on the creation of CDS even amongst the armed forces in the past.<sup>114</sup> The more recent opposition to the creation of Theatre Commands within some quarters has also been documented with reservations being highlighted on the basis of years of experience amongst some within the strategic fraternity.<sup>115</sup> Even when the idea received a positive sentiment, there were few studies which had gone into the details of its implementation criteria.

By implication, this suggested that the CDS was practically required to approach the subject *de-novo* and all possibilities existed on the table for analysis and possibly even implementation. In order to approach the subject objectively, the CDS ordered a number of studies in the house to seek recommendations on the structure and implementation of theatre commands. He indicated that by the end of 2020, studies were likely to be ordered for a period of three months for the establishment of theatre commands. These would be completed by 2021 and directives would be issued for theatrisation by 2022.<sup>116</sup>

The Air Defence Command, possibly the first to be established, would receive inputs from a study being headed by the Vice Chief of Air Staff. This was logical since the Air Force was likely to emerge as the primary service anchoring the Air Defence Command. And further, it presented a less complex task of integration, as compared

with theatre commands, which remain on the drawing board, given the peculiar requirements that these demand in the context of India's security challenges.

#### **Concept of Theatre Commands**

The concept of theatre commands is not new. It has been in the making for over 70 years, with the US armed forces taking the lead in its inception and implementation. However, their experience has undergone similar debates of the kind that have taken place in India.

The inception of a unified command finds its origins in World War II, wherein the experience of the allied forces encouraged the United States to continue with a combined force headquarter. This saw General Eisenhower take over as the commander of the US forces in Europe. In contrast, the forces were placed separately under Admiral Nimitz and General McArthur in the Pacific theatre. However, the Navy indicated its dissatisfaction with this system in contrast with the opinion of the Army and Air Force, fuelled by the possibility of losing command and control over forces to conduct operations by McArthur.<sup>118</sup>

At the end of the deliberations, the US went in for seven unified commands to include Far East Command, Pacific Command, Alaskan Command, Northeast Command, Atlantic Fleet, Caribbean Command and European Command. The core structure of each of these commands followed a similar system. This included two or three components, with the Army, Navy or Air Force being a part of the command. The component command was led by officers of the particular service and each commander had a joint staff to assist in their command functions. Finally, component commanders were at liberty to approach their service for support in terms of administration, training, supplies and other logistic requirements.

The Commands were provided strategic direction by the JCS, including assigning tasks and allocating resources to fulfil the same. Interestingly, the Unified Commander was assigned under the authority of a Service Chief on behalf of the JCS.

One of the first "battles" fought amongst the services was for aviation assets. The Navy contended that had it not been for the Key

West Agreement of 1948, the Air Force would have taken control of all aviation assets. According to the Navy, the take-over of assets was a part of the Air Force agenda. 119

The Agreement also delineated the primary role of each service, especially in relation to the division of responsibility and overlap between the Air Force and Navy with regard to possession of air assets, strategic bombing and dropping of atomic weapons. However, this conference was followed up with yet another one at Newport, Rhode Island in August 1948. Despite this, the fight to control resources remained a major cause of disagreement. This eventually came to a pass with the cancellation of the aircraft carrier the United States, leading the Secretary of Navy Sullivan to resign. A compromise was reached thereafter, though differences remained. 120

In the backdrop of the Soviet air threat to the US, a proposal was moved by the JCS for establishing a joint Continental Air Defense Command (CONAD) in 1954. The same was immediately approved and the Secretary of the Air Force was made the executive officer for the same.121

Over time, with the 1958 Reorganisation Act, President Eisenhower pushed for greater unification and a streamlined structure. "The days of separate land, sea and air warfare were over, the President believed; therefore complete unification of all military planning and combat forces and command was essential." The Act streamlined the command chain. "The new law authorised the President, acting through the Secretary of Defense and with the advice of the JCS, to establish unified and specified commands, to assign missions to them, and to determine their force structure. 122 In terms of division of responsibility, while the command and control wrested with this chain, the commands had operational authority to execute their missions. The responsibility to provide administrative support was with the Military Departments. The Military Departments were thus divested of operational powers and did not have a direct role in the executive orders being passed to the commands. The Joint Chiefs of Staff were part of the staff of the Secretary of Defense and could only issue directions on his behalf. Resultantly, further adjustments were made in the responsibilities of the three services.

The continuing bid to create cohesion led to the air transport services belonging to all services being transferred to the Military Air Transport Service, later redesignated as the Military Airlift Command in 1965. On 1 February 1977, its Commander was designated as a Commander in Chief of a Specified Command.

With this backdrop, which largely coincided with the Cold War period, events took a dramatic turn thereafter for the armed forces. The role of technology as a force multiplier emerged, especially in the cyber domain. This was accompanied by precision-guided capabilities which transformed the character of war, as was witnessed during the first Iraq war. The Afghanistan theatre emerged on the horizon with the Soviet Union entering the fray in 1979 and proxy campaigns gaining currency through special forces and intelligence agencies.

While the Goldwater-Nichols Act remains the most critical shift in the unified structure of the US armed forces and therefore the focus of debate, there were changes which preceded it and are important to note from the perspective of lessons that can be drawn for joint operations. The US established three joint commands, each of which would play a significant role thereafter.

On 20 November 1984, President Ronald Reagan approved the establishment of Space Command, with responsibilities that included warning, operations, control and direction to activities in space. The trajectory for the creation of the Special Operations Command also provides interesting insight. The process began with a realisation that there was inadequate appreciation of special operations within the services. The process began with the creation of a Joint Special Operations Agency headed by a two-star officer in 1984. However, it was found wanting with regard to coordination and therefore effectiveness. This led to the introduction of a proposal to create a National Special Operations Agency with the status of a unified command with an Assistant Secretary of State heading it. The focus of the command seemed clearly towards low-intensity operations, something that the armed forces were not comfortable with.

This situation was eventually corrected with the establishment of the US Special Operations Command as a specified command in 1987.

It is often argued that theatre commands are a luxury that can be afforded by a country like the US which has the requisite resources and fights beyond its borders. It is true that US resources are of a multiple order when compared with most other countries. It is also true that the primary challenges that the US faces are well beyond its shores. However, more recently, China too has undertaken major military reforms and one of the foundational principles of this initiative was the establishment of five theatre commands. These, unlike the US, are regional geographical commands which are all located within the country. And while China does have a substantially larger military budget than India, however, the logic and employment of forces remain similar. Therefore, in many ways, China's experience with theatre commands is likely to be more useful for India as the concept matures and gets implemented over the years. However, given the resource differential, it is also logical that India will need to evolve its own threat, capability and resourcebased model that best suits India's requirements.

Yet another characteristic of the evolution of military structures in general and theatre commands, in particular, has been the flexibility to evolve based on existing structural deficiencies. Changes reflected shifts emanating from regional threats, technological advancements like information revolution, cyber, space capabilities, etc. It also came from the need to create specialisations, economies and unified efficiency as was the case with the special operations and transportation command. The structure of commands has not been iron-clad and has undergone a number of changes over the years. This was aimed at improving an existing organisation or allowing it to evolve according to changing circumstances.

There was always resistance to change from one or more stakeholder every time change was envisaged. It was up to the political authorities to take inputs and thereafter give a decision on the same.

It does emerge that the US has been reasonably flexible in taking repeated decisions for making changes to their structures. At times it does suggest that these changes could have benefitted through greater deliberations and a deeper evaluation of the situation. To that extent, it remains a lesson for other countries like India to learn and undertake changes in a more thought-out and deliberate manner.

# Theatre Commands India: Structure and Implementation

The evolution of reforms in India's higher defence management has been analysed earlier in the book. The more recent changes can be seen over the last two decades, commencing after the Kargil conflict of 1999. The reforms received a major impetus with the appointment of the Chief of Defence Staff (CDS) and the establishment of the Department of Military Affairs (DMA).

The debate over jointness centred around the appointment of CDS. This was considered a vital pivot and enabler for implementing the wider reforms process. Even as the CDS remained the primary focus of discussions, theatre commands invariably came up as well. This was seen as a critical follow-up if real jointness was to be achieved down the rank and file of the armed forces. It also reinforced the vision of Prime Minister Narendra Modi, who felt that integration must be achieved not only at the apex levels of the defence forces, but also till the lowest. 126

This vision could only achieve fruition if it was accompanied by two factors: jointness in both planning and implementation. Having either one in isolation or their elements in part, was not enough to achieve the nature of integration that was envisaged or desired. This had been the case in the past when jointness was personality-based, as was witnessed during the 1971 Indo-Pak war. In other instances, it was thrust upon the armed forces by crisis situations. This was witnessed in Kargil most recently and prior to that in the 1965 Indo-Pak war. However, there is no example which suggests seamless integration from the planning process till the stage of final implementation.

The creation of a structure, including theatre commands, is not a guarantee for achieving jointness and integration. However, it certainly serves as an enabling mechanism for jointness to be implemented. This can best be achieved when a joint structure is also provided guidance by a joint doctrine and strategy. This implies that the vision that guides the actions of a joint plan and its implementation is also cohesive and collective in its formulation and articulation.

If a joint structure is the hardware of this system and a joint doctrine the software, the organisational culture that runs it on a day-to-day basis is its operating system. It is the ubiquitous working environment defined by its organisational culture that can raise or reduce efficiencies. It can create synergies or repeated systemic flaws which then require a reset to get the structure up and running again.

Before delving deeper into the subject, it would be useful to analyse the Kargil case study. It is not only the most recent, but also one which saw the army and the air force operate within the same theatre of operations. While a more detailed analysis of higher direction of war has been done by this author in a previous publication, some relevant aspects that can highlight the challenges related to the absence of joint structures will be reinforced.<sup>127</sup>

There have been repeated and regular debates on the issue of differences between the Indian Army and the Indian Air Force with reference to the employment of air power in Kargil in 1999. More often than not, these have been acrimonious with each accusing the other of failing to meet expectations or understanding the operational employment of air assets. Despite these accusations, the author's assessment of the sequence of events led to the conclusion that despite obvious differences, the structures and processes did deliver within the scope of an existing system. However, this does not take away the fact that this system could have functioned better if it was structurally and doctrinally aligned. There is little denying that despite command headquarters having air force officers posted as part of an advance headquarter, there was a tendency to look over the shoulder for directions and orders, as was the case during the Kargil conflict. It was also clear that even with decentralisation of orders for execution, this process remained largely bound by service perspectives. The absence of a joint approach emanating from a headquarter of the level of command and, in the context of this

discussion, a theatre was non-existent. While attempts have been made since to bridge procedural differences, these are bound to be affected by personalities in the absence of joint structures. This was indeed the case during the Kargil conflict.

The initial phase of the conflict, which witnessed the availability of sketchy information, led to demand of air assets which the air force considered ill-suited for the area of operations. However, instead of coming to a conclusion that could have pointed towards a better option, it became a case of repeated requests for the same equipment and repeated rejections of the requests.

It was also evident that the army was hesitant to share the complete intelligence picture with the air force and on their part, the latter did little to proactively suggest measures to overcome the challenges being faced. Instead, rules of engagement which placed flying restrictions within 10 km of the LoC were cited as part of operational constraints. 128

Not only did these incidents highlight inadequate understanding of each other's constraints and characteristics, it also suggested a situational disconnect until joint planning was put into place. The fact was that despite the situation being common, the framework that defined the response was different. The logic that governed it was also at a variance.

In the same situation, how would the presence of a theatre command instead have improved matters, if at all? As outlined earlier, in brief, three factors define the ability to create seamless jointness: organisational culture, doctrines and implementation frameworks. It would be useful to co-relate each of these factors with the situation, as it prevailed during the Kargil conflict.

It was quite evident that not only the army and the air force have very different organisational cultures, so does the navy. While to some extent this is bound to be the case in any country, irrespective of the nature of joint structures, however, the differences cannot become so acute that day-to-day functioning becomes a casualty as a result. Over time, possibly with the exception of time spent in the National Defence Academy and certain institutions like the Staff College, Higher Command Course and National Defence College, interaction that creates professional and social cohesion is limited. This leads to very different norms, procedures and structures that operate for each service. Even within the same military station, there are few institutional mechanisms which bring the services onto a common platform. Each operates as an independent island that prefers to remain self-sufficient and aloof. This is hardly suited for the creation of an environment that can be harnessed to nurture a common organisational culture. While it does not affect peace time functioning visibly, however during conflicts like Kargil, it is bound to have an immediate and substantial impact on war planning and combat efficiency.

The three services commenced work on their publicly available doctrines and strategies well after the Kargil conflict. And there was no joint doctrine that highlighted a common perception of warfighting. Even after Kargil, the services brought out individual service-specific documents. And the joint doctrine that did emerge in 2017 was clearly constrained by the compulsion to go in for a minimum common denominator.<sup>129</sup> In the bargain, it ended up saying very little of importance and watered down the contents to the extent of making it practically redundant. This was unlike the individual service specific documents, which were clear in their intent and perception. The absence of joint doctrines does not imply the complete absence of joint planning and thinking. In fact, attempts were made to create the necessary synergy in plans over time. 130 However, this is not a substitute for a joint doctrine, which provides a common thread for the services to plan and operate into the future. Doctrines can also limit the impact of personalities in decision making by facilitating the placement of procedures and systems which tend to mature over a period of time.

The implementation frameworks also became a constraint in achieving jointness during the Kargil conflict. Differences in the employment of different types of aircraft on the basis of their operating characteristics, regulations and constraints of employment within a certain distance from the LoC and intelligence regarding the nature and type of intrusion that had taken place clearly suggests a sub-optimal implementation framework at the functional level.

Ultimately, it required the three Chiefs to agree upon a broad action plan and the commands were thereafter tasked to implement the same. The acrimony that was visible during the conflict has been evident thereafter as well during debates and discussions with the air force and army perspectives often blaming each other.<sup>131</sup> This despite the fact that given the existing structure and organisational culture in place, the services achieved excellent results and the consultative mechanism continued irrespective of differences between them.

These factors suggest that the creation of theatre commands may not necessarily resolve the constraints in the planning process. While it will facilitate joint plans and their implementation, however, there will remain a need for overarching directions and guidance. This can only evolve from the office of the CDS and the Defence Planning Committee (DPC), headed by the National Security Advisor (NSA).

Despite the fact that theatre commands are more independent and cohesive in their structure, they do not and must not function in isolation. They have the benefit of support structures of the entire country. More specifically, within the armed forces themselves, additional structures will provide support to ensure the operational effectiveness of theatre commands. Prior to attempting options for the creation of theatre commands, it would be instructive to understand the role and function of some of these structural elements.

Component Commanders. A theatre command will have different components which will make up the command. This can include the army, navy, air force, coast guard or the special forces, depending on the role, responsibility, area of intended operations and the terrain. Each component will have a commander who is designated as the component commander. The person exercises command over his respective command in conjunction with the other components under the directions given by the theatre commander.

Functional Command. While theatre commands are based on a geographical area of responsibility for which the theatre exercises its operational control, functional commands are based on a specific functional role that they fulfil. It could be related to logistics, communications, cyber issues or even training. As is evident from these examples, a functional command is designed to function in a supporting role to the theatre command.

Agency. In addition to functional commands, the term agency is also employed to describe a functional element. In India's case, this has been used to describe both the cyber and space setups, which are not fully functional commands. In the present context, these are joint and have been placed under a Major General or equivalent rank officer from the armed forces.

In addition to these components, the others are well known and do not need elaboration. This includes the Department of Military Affairs (DMA), the CDS, Permanent Chairman of the Chiefs of Staff Committee (COSC), the Headquarter Integrated Defence Staff (HQ IDS) and the Chiefs of the Indian Army, Air Force and Navy.

#### **Stature of Theatre Commanders?**

The rank and stature of theatre commanders have often been a subject of discussion, given its relevance to operational factors and human resource management.<sup>132</sup> It is not the purpose of this study to delve into the specific appointments in detail. However, given that the foundational aspects of theatre commands will emerge from its apex level, both in terms of interaction with state functionaries within the government and the chain of command, it is important to evaluate the rank structure of theatre commanders.

Previously, the inter-se co-relation between theatre commanders, chiefs of respective services, COSC and the CDS has been analysed. This assessment included the major responsibilities of each of these institutions and appointments. The conclusion suggests that the major operational responsibility across theatres will rest with its commanders. The scope and nature of this responsibility would entail command across geographical spreads and of numbers, which could be more than the size of most armed forces in the world. While this by itself does not necessarily become a criterion, the complexity of its association with command and control does.

As an illustration, each theatre will have component commanders in charge of their respective service element. This could include the army, navy, air force or even the coast guard as relevant to a particular theatre. In addition, the theatre commanders will also need to interact with subordinate commanders. These theatres (like the envisaged one on India's western border) may have as many as 8-9 corps operating within the new structure, besides a bulk of aircraft of the air force and navy and maritime assets.

Similarly, the Maritime Theatre will command and deploy the entire naval resources held by the country, in addition to the allotted resources of the army and air force. This implies that the commander will remain responsible for an area that stretches across the Indo-Pacific for now and this is only likely to enlarge over a period of time. An accretion in ships is also on the horizon.

Not only will these theatres command large resources, the commanders will also interact with their counterparts from other countries. In most cases, as illustrated by the US Indo-Pacific Theatre Command, as also China's Western Theatre, these appointments are held by four-star officers. <sup>133</sup> In future, the deployment of multinational forces may also require collaborative operational responsibilities to be undertaken with partner countries. Under such conditions, a fourstar Theatre Commander will be able to function on an equal footing with his counterparts. In a situation that demands both traditional military duties to be undertaken by the armed forces as also military diplomacy, it becomes important for theatre commanders to interact as co-equals with their counterparts.

Taking this logic further, it is equally important that theatre commanders are assigned an appropriate stature within the operational hierarchy, which includes commanders from central police organisations and paramilitary forces. The need to command elements from these forces under operational conditions creates a requirement of having a logical and functional chain of command.

The other factor that dictates restructuring of an organisation is its human resource requirements. While it is understandable to cut down on senior ranks with a reduction in the size of the armed forces (and this would possibly follow in due course), however, until then, the human resource aspect also demands that the hierarchy must remain balanced and provide opportunities for professional and career growth to officers, just as it does to other ranks within the armed forces and other government services. While this intent must not take the existing numbers of senior ranks as a starting point for restructuring, however, it must also not create a pyramid that becomes detrimental to both operational and human resource management criteria.

Keeping in view these aspects, it is felt that theatre commanders should be four-star rank officers with similar seniority as the Service Chiefs. It will facilitate the necessary coordination and command and control within the theatres. This includes command over certain regional commands that could be created or retained. This may include the Andaman Nicobar Islands or perhaps even areas like Jammu and Kashmir to cater to the specific requirements of countering terrorism.

It is also important to co-relate their functioning with existing service chiefs. It is initially envisaged that the Service Chiefs will continue to guide operational aspects as part of the Chiefs of Staff Committee. Over time, their role will shift to raise, train and sustain function. The evolving relationship between the CDS and Service Chiefs suggests that having four-star theatre commanders will not become a constraint for ensuring a smooth functional relationship between them and the Service Chiefs. This will be dealt with in detail in the chapter on chain of command. Suffice to say at this stage that the stature of theatre commanders needs to relate to their place within the chain of command, as envisaged to be over a period of time. This will also include the inter-se relationship of different appointments, which includes the CDS, Secretary DMA, Chairman COSC, Service Chiefs and the Theatre Commanders.

## **Geographical Spread of a Military Theatre**

The allocation of geographical areas to a theatre command is bound to raise obvious concerns, given its impact on existing structures and the number of senior military appointments that can potentially be affected. However, the very inclusion of this factor in any discussion retains the potential of converting it into a term of reference. Therefore, the discussion hereafter will focus on the importance of operational effectiveness, challenges posed by the spread of an area,

its geographical parameters, command and control issues and not its impact on the existing rank structure of the armed forces.

There are two elements associated with the successful reorganisation of a geographical command. First, incorporation of constituents which will contribute towards creating a capability that is operationally most effective. And second, the ability to retain suitable command and control over the forces under command, which will be influenced by the geographical conditions, nature of threat envisaged and the infrastructure to host the force levels. This includes designated establishments to locate headquarters and their subordinate formations.

There cannot be a structured model for defining the right size of a military theatre. It varies depending upon the scope and scale of responsibility of a country and the nature of geographical spread. Two examples are certainly worth discussing here. In the case of the US, its theatre commands have seen repeated, and one can argue successful employment over the decades. And more recently, in the case of China, while the theatres are a more recent creation, these have been carved out from within a domestic geographical spread. In the case of some, the terrain is also similar to the one available on the Indian side.

The INDOPACOM comprises an area which constitutes 36 countries and caters to 50 per cent of the global population. In terms of its area, the theatre has a boundary with each of the other five geographical theatres. It also has multiple components, sub-unified commands to cater for specific areas like Japan and Korea. All major components of the US defence forces form a part of this command. 134 The INDOPACOM also covers more than half the area covered by the globe. 135

China's Western Theatre Command not only covers the complete northern border with India, it also spills over across neighbouring Myanmar as well. It is the largest of the five geographical commands in China. In addition to all wings of the armed forces, the theatre also controls the People's Armed Police Force which is responsible for maintaining internal security within the region that includes Tibet and Xinjiang. 136 While the command has responsibilities in Central Asia as well, however, its primary focus remains India, given the border disputes that exist between the two countries.

In both cases, the geographical spread of the theatres is likely to extend beyond the ones that are envisaged in the case of India. And as experience of these countries indicates, distance and geographical spread is no longer the kind of challenge for command and control in light of modern communication capabilities, as it perhaps was in the previous decades. In addition, a theatre almost always creates smaller commands within its ambit to ensure more intimate control over specific geographical areas, as is the case with the INDOPACOM. This is likely to be replicated in the Indian context as well. The specifics of these possibilities will be discussed later in this section.

This brings up a related question: How many is too many? If the size and area of responsibility of geographical commands are assessed in the context of the US and China, it emerges that the geographical spread has not been divided based on any equitable distribution model. Instead, it represents a common contiguous area or a common threat. Even a casual look at the unified combatant commands of the US indicates a separate command for North America, South America, Africa, Europe and Russia, Middle East (West Asia) and the Indo-Pacific. Similarly, the theatres created by China address challenges emerging from India, Taiwan, Japan and the South China Sea. They also have the potential for collaborating for any major threat that may emerge from sources like the US. This essentially suggested that while the size was not necessarily a limitation, a combination of threat and geographical extent did influence the boundary of a theatre command. As will be seen later, this becomes a factor for deciding upon the number of commands in the case of India as well.

Overall, as the Chinese experience suggests, the trend has been to reduce the number of regions rather than increasing them. Their numbers came down from 13 to 11 and further to 7. These military regions were eventually converted to five joint theatres. This was meant to attain the larger objective of "joint operational command, optimising military structure, enhancing policy systems and civil-

military integration, and building a modern military with Chinese characteristics that can win information age wars."137

If that be the logic for the creation of geographical theatre commands, then there are three options that seem ideal in the case of India. And there are reasons for not having more or less, as will be discussed in detail, especially since arguments have been made in favour of different numbers over time.

India has one of the most diverse geographical layouts along its western and northern borders. If the logic of creating different theatres for different kinds of geographical conditions is proposed, then the western border should possibly have at least four or five theatres. From the west, the salt pans of Kutch are distinct in terms of the operations that are undertaken there. This changes to the deserts of Rajasthan as one moves further to the Northeast. Further northwards, the plains of Punjab present a very different scenario with linear obstacle systems dominating the ground conditions. Still, further, the hills and mountains take the armed forces in classical mountain warfare territory. And eventually, the glaciated areas of Siachen and its neighbourhood yet again demand a distinct fighting form. However, can these terrain differentiations become the basis for creating joint theatres? Quite obviously not. Even within the present geographical conditions, commands have varying geographical areas within their area of responsibility. Commanders adjust to different fighting procedures accordingly.

The maritime domain brings up a very different challenge. It can be argued that the Western Indian Ocean deals primarily with Pakistan, while the Eastern Indian Ocean region with China. This suggests the need for two maritime theatres. However, past wars and future competition clearly suggests that this divide is not only artificial, it is also likely to become a constraining impediment around the free-flowing nature of maritime mobility and warfare. It has been evident in the past that neither Pakistan has been constrained by such artificial boundaries, nor China. In the case of the latter, the recent propensity for a westward push further reinforces the need to have a single coordinated and controlled theatre for the entire region. Further, any need for a specific area within its ambit that needs a separate sub-entity to exercise more intimate command can be created. As an illustration, this could be done for the Andaman and Nicobar Islands.

There has been a similar argument raised regarding the need for two theatres along the border with China. The reasons cited range from varying terrain conditions, challenges related to lateral mobility and command and control. The examples of the Chinese Western Theatre quoted earlier and the expanse of the US INDOPACOM clearly suggests that such conditions are an inherent characteristic of theatre commands. These will remain integral to its employment. In addition, the advantages of creating a cohesive force structure far outweigh the limitations placed by geographical constraints. In addition, the chain of command within the theatre command allows the creation of sub-entities for specific roles or region-specific requirements as highlighted earlier. Further, the tendency to reduce the size of unified theatres will defeat the very purpose for which these are envisaged and created.

Arguments have also been made for a two-theatre and single theatre setup in India. While the former is envisaged based on vertically bifurcating India with threats from Pakistan and China as the basis for the division, the latter emerges from the Air Force-centric argument in favour of treating India as a single theatre. <sup>138</sup>

The argument in favour of two theatres suggests that if the objective of unified commands is to bring together the three services into a single entity, this can best be achieved by including the maritime dimension into the structure. In such a case, the boundary will run from the Sino-Pak division in the north, bisect India vertically keeping in mind the location of assets for the two theatres and extend further into the ocean. This argument possibly comes closest to feasibility and does make an important point regarding true integration. However, the major constraint it faces emerges from the artificial divide of the oceanic waters in the process, which is detrimental to the treatment of the larger span of not only the Indian Ocean region but also the larger Indo-Pacific as a single entity. There was a reason for the US to convert their Pacific Command to the Indo-Pacific Command. India's decision to cut this space into half

would in that light be seen as a regressive step for integration and further to the concept of Indo-Pacific.

And finally, the argument in favour of India as a single theatre emerges from the term of reference that air assets should not get divided. There is merit in the latter argument from the perspective of a central coordinating agency that facilitates the work of existing commands. However, it is the nature of this agency that leads to differences of opinion.

One perspective suggests that the CDS should be designed to provide single point advice on "philosophical matters as future force structure, while the C-in-C becomes the single-point advisor (and commander) for prosecuting war... In essence, this structural reform would create two parallel structures responsible for war and defence." The author adds, "Thus, the HQ would largely retain their current structure, with their head being the Chief of Staff (COS) both in name and function. The responsibilities of this service COS would be that of managing the staff functions of training, equipping and evolving the respective service."139 The reasons that the author offer for this solution stem from the failure to formulate a joint strategy, dual-hatting of Chiefs and different levels of command and control. 140 The implication that a theatre-based system will fail on all three counts is founded on a certain premise of the structural setup. However, if the structure does evolve in a way that ensures control and coordination at the apex level, then both creations of a defence or military strategy, as well as command, allocation and shifting of resources, does not present the kind of challenges that have been envisaged.

It is often premised that resources once allocated to a theatre would not be available for switching thereafter. This is simply wrong. The role of the CDS and his advisors, as well as the priority laid down by the CCS and implemented by the Defence Minister, will ensure that resource allocation remains flexible and fluid with a need-based allocation as its inherent characteristic. Dual hatting too will be ensured with theatre commanders prosecuting war while the service chiefs provide support for this endeavour, thereby ensuring their importance and relevance. The dual hatting of the CDS is not an impediment since he will not only be responsible for strategic direction, but also coordination of the war efforts as the Permanent Chairman of the COSC. The desire or the design to recreate a C-in-C with an ambit that covers two vast stretches of unresolved borders and the Indo-Pacific might end up creating too complex and unwieldy a structure that will necessitate the creation of multiple levels of coordination slowing down the process of decision-making and implementation of directions. Further, by retaining the service chiefs in their traditional roles, the very purpose of defence reforms, which is to ensure integration at all levels, will be defeated. In essence, it is retaining the same system with an additional C-in-C at the apex level.

However, the core argument of the author and a large number of well-regarded officers from the Air Force remains valid. That is the need for a central coordinating mechanism for the employment of air power. And this is a role that can best be undertaken by a specialist structure that has the mandate, expertise from all three services and control over the complete resources that come into play for the employment of air power in addition to the surveillance and ground-based resources held by the Indian Army for similar responsibilities. While this role has been part of the mandate of the Chief of Air Staff in the past, in future as and when the Air Chief moves to a raise train and sustain function, this can best be undertaken by a coordinator for similar functions on behalf of the COSC. The Air Defence Command is ideally placed to take on this responsibility as will be discussed later.

Eventually, the decision to create theatre commands must be guided by the effectiveness of executing the mandate. Procedures and structures must aim to fulfil this criterion alone. Every other factor to include human resource parity, the number of stars on the shoulder of the commander should remain secondary.

An assessment of experiences of different countries over the last century brings up a variety of examples which challenge some of the arguments that have been raised in support of one proposition or the other. India's experience of the 1971 Indo-Pak war saw two theatres opening up simultaneously on the eastern and western fronts. A

third possibility opposite China along the northern borders and the fourth challenge in the proximity of the Bay of Bengal emerged at the behest of the US. As Admiral Shrikhande similarly argues that the world wars saw major powers fight along with multiple theatres. 141 This was accomplished despite the relatively primitive means of communications and the challenges it must have posed for effective command control. Similarly, Israel during the course of its wars fought along multiple fronts. So did Vietnam fight along with more theatres than one in the past, reinforcing the efficacy of this force structuring.

# Chain of Command

One of the most important factors that will remain decisive for the successful functioning of theatre commands is the effectiveness of its chain of command. Eventually, this chain must be shorter than the existing system, better equipped to take decisions and structured in a way that allows decentralised decision making and execution to take place. This is where the decision dilemma exists, with various possibilities that can emerge over time (see Figure 1). In this section, an attempt will be made to evaluate options and suggest the most appropriate one in the Indian context.

### **Role of Major Appointments**

Unlike some of the systems in countries like the US and UK where the evolutionary process has been going on for a number of decades, in India, the scope of restructuring envisages a quantum shift. However desirable this may be, its implementation can present challenges. The apex level restructuring and the ensuing chain of command relate closely to the level of integration that is existing at the functional level. This implies that theatres and their subordinate formations should not only be fully integrated, but should also be in a position to operate with relative independence. However, since this integration is likely to take time, the implementation of a desirable change of command could be promulgated in two phases. In the first phase, the Chiefs of Staff will remain in the chain of command as part of the COSC. And eventually, as the second phase is promulgated, they will take over an advisory role, with theatre commanders gaining more independence of operational command, even as the Chairman COSC remains an overseeing authority for the conduct and coordination of operations. To that extent, the larger aim of reducing the chain of command will only fructify with the second stage of reforms taking place. This envisaged evolutionary process deserves a more detailed examination.

Figure 1 Apex Structure: Theatre Command **NSC** 

#### CCS and NSC

In the existing system, national security policies emanate from the Cabinet Committee on Security (CCS). This comprises of the Prime Minister (PM), Defence Minister, Home Minister, External Affairs Minister and the Finance Minister. On the matter of security, this grouping is advised and supported by the National Security Council (NSC), with the National Security Advisor (NSA) as its fulcrum. In more cases than not, since the NSA is appointed by the PM, he remains in close contact with him on a regular basis. He also has the benefit of inputs from intelligence agencies, Chiefs of the Army, Navy and Air Force as part of the Defence Planning Committee (DPC), which also has the Defence, Foreign and Expenditure Secretaries as members. While the role, responsibilities and stature of the NSA have remained flexible since the appointment of Brajesh Mishra as the first incumbent, however, the advisory role on matters of national security has remained consistent. Therefore, the existing role of the NSA and NSC as a supporting and coordinating institution in relation to the CCS remains equally relevant in any future organisational structure. This includes the periodic writing and release of a National Security Strategy (NSS), which remains a major lacuna in terms of the planning process over the last two decades, despite the major strides that have been made through the creation of structures.

#### CDS/Permanent Chairman COSC

According to the mandate issued through the government notification, which assigns responsibilities to the CDS in his role as the Permanent Chairman of the Chiefs of Staff Committee (COSC), he has not been given command functions. He remains responsible for providing single point advice on joint issues. While the press release does not provide details regarding the specific operational role in this regard, it is felt that the CDS in his role as the Permanent Chairman emerges as the only one amongst the existing senior military hierarchy, who can undertake the role of operational coordination. The COSC and the Chief of Integrated Defence Staff (CIDS) are suitably placed to support the Permanent Chairman in the fulfilment of this role.

This implies that the existing mandate of the Permanent Chairman, which according to the government release does not involve a command function, may need to be modified to an extent over time. While the Permanent Chairman may still not exercise direct operational command over forces, however, he will be required to formulate the broader strategic plan and ensure its implementation, which will have cross-theatre relevance. He will also disseminate orders, coordinate plans and order the switching of assets between different theatres in pursuance of the directives received from the CCS and/or the Defence Minister. This evolution in the role of the Chairman COSC over time will be necessitated by the need for an authority that can oversee the wider scope of military operations. He will also need to coordinate the same with other government agencies at the central level. Further, the Chairman will receive inputs from functional commands and agencies which will need collation and action, in addition to the operational picture emanating from geographical theatres.

Evidently, the role of the CDS in his capacity of Chairman COSC is bound to increase over a period of time. The dual-hatted responsibility of the CDS, wherein, he functions both as a Secretary in the Government of India as head of the DMA and in his capacity of Permanent Chairman of the COSC, raises certain pertinent questions. The first: Can an individual vested with the responsibilities

of Secretary Government of India, with all the administrative and financial powers, in this case, 80 per cent of the defence budget, have the time and ability to also fulfil an operational requirement? Or should the operational role of the CDS in his capacity as Permanent Chairman be removed from his charter and delegated to someone else? And conversely, even as the CDS as Chairman Chiefs of Staff Committee fulfils his operational responsibility, should the role of Secretary DMA be taken over by someone else?

These questions can best be answered on the basis of future responsibilities envisaged for the CDS/Chairman COSC, given the changes in structures that will come into play. This will include theatre commands coming into effect, the shifting of service chiefs to a raise, train and maintain function and the Chairman COSC shouldering enhanced operational responsibilities. This will include formulation of the strategic plans at the national level, designation of theatre responsibilities and priorities, monitoring of the operational picture on a regular basis, assigning capability development priorities and a follow-up of their process, just to name a few.

This evolution in responsibilities of the CDS will take place with simultaneous evolution of theatre and functional commands. From a stage wherein these commands go through the process of their integration and establishment of command and control protocols, to its completion, is likely to take some time. Therefore, it becomes important to ensure that the interim stage of evolution is smooth and the changeover is as seamless as is practically possible under the circumstances.

These are important concerns, especially if the CDS has to do justice to his role and responsibility, as envisaged in the government order. There are two possible options to overcome this challenge. Both these possibilities require an adjustment in responsibilities that come with the appointment of CDS at present to include Chairman COSC and Secretary DMA.

In the first option, the CDS remains responsible for both the roles of Secretary DMA and Chairman COSC. However, in order to cater to the enhanced role, he is provided with an additional senior officer of the level of CISC. Resultantly, while the overall responsibilities will continue to remain with one individual, however, he will be supported by two separate sets of support staff headed by a Vice Chief of Defence Staff and Vice Chief of Operations to take on that extra load that the CDS is likely to experience. While this option will certainly reduce the load on the CDS, nonetheless, the overall responsibility of both operational planning and day to day bureaucratic functions will continue to remain with him. In that respect, it will not address the enormity of the responsibility that comes with the two appointments he will continue to hold.

The second option also suggests division of responsibility, though in a different form. In this case, as the system evolves over time, it will lead to an increase in operational responsibilities of the CDS in his capacity as Chairman COSC. Resultantly, the CISC could take over as Secretary DMA. In addition to him, an additional officer of similar rank gets inducted to support the CDS as Vice CDS focusing primarily on operational issues. This will provide the CDS more time to focus on strategic planning, operational oversight and coordination and all other responsibilities envisaged, which includes capacity building. Since the Secretary DMA will continue to function in close coordination with the CDS, the entire scope of responsibilities that had initially been assigned to the CDS will remain synchronised.

In addition to the change in responsibilities over time, their enhanced scope will also necessitate incorporation of support structures for the Chairman COSC and CDS to fulfil their strategic and operational mandate. While HQ IDS was a well thought out establishment when it was created, however, its structure and capacity both will need to be tweaked to ensure that it fulfils the responsibilities of the CDS over time. Consequently, operational, intelligence and operational logistics functions under the CDS and within HQ IDS can be strengthened by amalgamating assets from existing organisations within the services dealing with these subjects. As an illustration, officers of the Director General Military Operations, Director General Military Intelligence, Director General Information Security and even the Director General Operational Logistics from the Army and similar establishments from the other

two services may need to be brought under the CDS to provide him with the requisite staff support. Over time, the role of the CDS will evolve and this can dictate any further changes that may be required to cater to the enhanced responsibilities of the office of the Permanent Chairman and CDS.

Bureaucracies tend to expand in size over time. However, while their size expands, they often tend to become inward-looking as a result of the fencing that they erect around their specific charter of duties. The bureaucracy within the uniformed community is no exception to this characteristic. While this may work at the functional level, it creates undesirable hurdles in strategic decision making, which is what the CDS will be associated with. Any attempt to create verticals headed by senior officers will discourage horizontal linkages which are vital for decision making at that level. As an illustration, procurement cannot be isolated from the military policy. Similarly, military plans cannot be isolated from manpower planning and organisational restructuring. Therefore, the office of the CDS, Permanent Chairman and their associated staff will need to develop the ability to monitor the big picture, even as they decentralise the execution to theatres and support to the Chiefs of the Army, Navy and Air Force. Any attempt to micromanage affairs is likely to slow down decision making and make the theatres an extension of a higher headquarter, defeating the very purpose of its establishment.

The model being discussed in the Indian context has both similarities and differences with one of the most evolved and successful setups - the US higher defence organisation. These arise from commonalities and differences in the context of the realities existing in the two countries. The distinction relates to the responsibilities of the CDS and the role the appointment will have.

As has been pointed out a number of times, the US defence budget allows the theatre commanders to have independent resources while they operate across the globe in areas separated by vast physical distances. The distinct role and responsibility of each theatre further lend itself to relative independent functioning. The decentralised structure allows a day to day operations to be

undertaken by theatre commanders. And the Secretary of Defence or the Chairman Joint Chiefs of Staff Committee comes into the picture for policy guidelines and resource allocation. This is evident from the role and responsibilities assigned to the Chairman which broadly involves:

- 1. The Chairman of the Joint Chiefs of Staff is appointed for a period of four years, which can be extended by the President for a period of eight years.
- 2. For an officer to be appointed Chairman, the person should have served as the Vice Chairman of the Joint Chiefs of Staff, Chief of Army, Navy, Air Force or Marine Corps, or commander of any unified or specified combatant command.
- 3. The functions of the Chairman include:
  - a. Planning Advice and Policy Formulation
    - i. Provision of providing Strategic Direction to the President and Secretary of Defence.
    - ii. Strategic and Contingency Planning
    - iii. Global Military Integration
    - iv. Comprehensive Joint Readiness
    - v. Joint Capability Development
    - vi. Joint Force Development
  - b. National Military Strategy
    - i. National Military Strategy
    - ii. Risk Assessment
    - iii. Annual Report on Combatant Command Requirements

It is evident from the charter of responsibilities of the Chairman that his role remains limited to provision of advice on issues like strategic direction of the armed forces, contingency planning, integration of response and structures, joint capability development, risk assessment and assisting in formulating a defence strategy. It also becomes clear that the Chairman is not directly involved in the routine operational implementation of directives to the geographical commands or for that matter functional commands.

Incidentally, in the US system, there is also a provision of a Vice Chairman, who has the mandate to step into the shoes of the Chairman if the need arises. This clearly suggests that he remains in the picture of all that takes place within the structure.

It has often been argued that India does not have much to learn from the US higher defence organisation given the differences in the realities of both countries. This includes the absence of a major conventional military threat to the US mainland, the offshore location of theatre commands, the vast resources at the disposal of the US defence establishment, which allow them to create separate resources for each geographical theatre and a relatively better-informed political establishment on military affairs.

While each of these arguments seems true when viewed in isolation, the fact remains that the principles of employing joint structures and assessing hierarchies do not change with changing systems. The implementation of these principles can certainly be suited to local conditions of each country or environment. There is no denying the fact that the US defence establishment in some form or the other has been experimenting with joint operations and structures for long. Their own assessment of early experiments dates back to 1812. Therefore, if one were to look at their history, there are lessons similar to the ones India is grappling with. And there should be no hesitation in learning from those. And the American example clearly suggests that the role of the Chairman does include operational coordination, direction and support to the President and Secretary of Defense. However, it does not include direct command of forces.

Does it mean that the Chairman is not important enough and he operates on the sidelines of the decision-making system? The answer is no. The Chairman fulfils a very important role of enhancing jointness, coordination and facilitating strategic direction. These are critical functions as is evident from the repeated critique emerging from strategic analysts. The need for a National Security Strategy and a Defence Strategy has been repeated all too often and for good reasons. The ongoing restructuring is taking place, as are procurement priorities in the absence of a clearly articulated

strategic direction for the defence establishment in the country. For the sake of argument, this can potentially raise the possibility of preparing for a wrong war, including support infrastructure and equipment.

#### COSC

The existing structure places the COSC as an intermediary body which coordinates the planning and execution of military operations between the services in line with directives from the CCS, either directly or through the MoD. These directives are further implemented by the commands within the services. In a best-case scenario, this is a planned and cooperative endeavour. However, there have been instances in the past when this coordination has been less than perfect. This was evident during the initial days of the Kargil conflict, as has been highlighted earlier. The previous system suffered from multiple operational inputs which came from the Chiefs, with the Chairman of the COSC himself being in a rotating appointment. Worse, decisions had to be taken by consensus within the COSC, which ruled out tough calls, especially on contentious issues during peace time. It also saw multiple channels of implementation of policy directives. These channels did not necessarily coordinate during the implementation of the mandate, leading to varying degree of cohesion depending more on personalities rather than a well-established procedure that defined implementation of orders. This meant that there were weaknesses at all three levels. These were in terms of operational inputs to the CCS from the COSC, coordination within the COSC since it was based on consensus and multiple channels of implementation thereafter, often moving in their own directions.

The appointment of the CDS has dictated the need for a Permanent Chairman of the COSC. Since the COSC does have an operational role, the Permanent Chairman will also exercise the same. At present this includes command over the Andaman and Nicobar Command (ANC), Space and Cyber Agencies and the Special Forces Division. In future, this is likely to expand with additional tri-service establishments being created. This would imply

modifying the mandate of the appointment. Conversely, there is also a possibility of merging the ANC with a future Maritime Command and creating a functional command for the other agencies presently under the Chairman of the COSC.

More importantly, what would be the composition of the COSC once theatre commands are created and what will be its modified role in that case?

The objective of the Chiefs of Staff Committee must flow from its role and responsibility.<sup>143</sup> This includes administering tri-service organisations, coordinating acquisitions, bringing about jointness in operations, logistics, training, transportation, communications, maintenance and repair. It would also include better utilisation of infrastructure and planning for acquisitions and capability development. However, with the creation of theatre commands, the need to coordinate operations and provide strategic direction will become an important function of the COSC. This is likely to impact the immediate and future role of the COSC. While the near future will continue to see it exercising the operational mandate it has. However, in future, even as this mandate remains, the role of the service chiefs is likely to undergo a change.

It is evident from these functions that even as the CDS in his capacity as Permanent Chairman Chiefs of Staff Committee chairs the COSC, the three Chiefs of the Army, Navy and Air Force should be a part of the same, along with the Chief of IDS, who can function as the member secretary. Theatre commanders can be brought in for deliberations as and when needed. The same criteria can be followed for functional commanders, given the specific areas of expertise they represent. By including the theatre commanders in all meetings as permanent members, their focus on the operational mandate gets diluted even as they get involved with decision making on force support issues. This is best left to those who have the responsibility of the same.

#### The Service Chiefs

The press release announcing the appointment of the CDS and notifications thereafter providing the scope of work of the DMA, outlined the division of responsibility between the DoD and DMA. It also clarified the responsibilities of the CDS in his different avatars. However, the changes in the responsibility of the three service chiefs were not the focus of information put out in the public domain. In fact, the release clearly stated that the CDS would not have command responsibilities. Under the present circumstances, this implied that there was no change in the operational role of the service chiefs. However, this is bound to change over time with the creation of theatre commands.

The present chain of command places the service chiefs as the hub around which services are structured. They not only steer the staff at their respective headquarters, but also the operations undertaken by commands through the C-in-C's in charge of their respective areas. However, with joint service theatres coming up, no individual service chief will be in a position to control and command the operations of the theatre. Therefore, the individualistic role that service chiefs presently undertake would become redundant.

This leaves the option of the service chiefs remaining in the chain of command as part of the COSC. The other option is to keep them in a consultative role and not directly in the chain of command for the execution of military operations.

In future, both these roles will possibly become a reality depending upon the stage of evolution of the ongoing restructuring. In the first phase, while the theatre commands would be in their evolutionary stage and full integration within them remains a work in progress, the service chiefs, as part of the COSC will probably continue to be a part of the chain of command to ensure coordination and continuity. However, over time, when the theatres become fully operationalised, including their restructuring and integration, the service chiefs, even as they remain a part of the COSC, will take over the role of raise, train and sustain.

It can be argued that the continued insertion of the COSC in the direct chain of command will add an additional layer of decision-making, thereby delaying the process. It can diffuse the focus on events. The theatre commander will also be looking over his shoulder for confirmation of orders, negating the very reason for

the creation of the structure and its head. It could create a potential disconnect between the theatre commander who will be monitoring the situation and COSC members in the national capital.

The Indian higher defence management system is peculiar given its evolution over the years. Unlike other systems prevalent in the US and even to an extent in China, there is little choice but to create an apex level body for coordination of operational functions and strategic guidance. The COSC is the only option for fulfilling that role under the existing organisational structure.

Further, service chiefs as part of the COSC can provide the benefit of their experience and expertise to assist in evaluation of aspects that the theatre commander may not necessarily be handling in their field role. This includes readiness and availability of force levels, understanding of competing demands and inputs from central agencies. Further, the theatre commanders are likely to focus on operations within their respective areas. However, given the interlinkages that exist between India's western and northern borders and the Indian Ocean Region (IOR) and, as time progresses, the Indo-Pacific, there will remain a need for a professional body of experienced officers with the requisite staff to provide strategic guidance and ensure necessary coordination amongst theatres and other support agencies. While the role of the service chiefs will possibly see evolution over time as theatres mature, the CDS as Chairman will need to continue overseeing this function in consultation with the service chiefs.

Even as the role of service chiefs is debated in the context of theatre commands, it is important to note that this is seen as distinct from their existing role. By co-relating, the service chiefs of today or yesterday with their future role and responsibility is bound to create a sense of their being given a reduced or truncated responsibility or even a diminished standing within the hierarchy. However, even as the role of service chiefs will tend to vary with the creation of theatre commands, it will remain important. Their responsibilities will become more focussed and narrower, thereby ensuring that it does not get diffused through simultaneous emphasis on full-time operational requirements and administrative tasks being performed.

This will entail the role of raise, train and sustain. In essence, this implies recruiting and ensuring the battle worthiness of a service.

A question that is bound to be raised is the co-relation between theatre commanders and service chiefs. Over a period of time, appointments of senior officers of the armed forces are bound to be governed by qualifying parameters. This could include experience in tri-service appointments, to include both staff and command streams. It is apparent that a theatre commander in command of large integrated formations belonging to a particular service should have had the experience of joint field commands prior to taking over a theatre. In case a service chief also has a similar profile, there is no reason for either one of them to not become the CDS. This will be dependent on their suitability for the responsibility at hand. However, for a theatre commander to become a CDS, the individual concerned would need a certain minimum qualifying service in the appointment to gain the experience required to take up the enlarged role.

With time and experience, the roles and responsibilities of the service chiefs, theatre commanders and the CDS are bound to evolve with greater exposure to tri-service environments, which remains limited in the present context.

# **Linkage with Theatre Commands**

One of the limitations faced with the existing structures relates to the complicated and diverse chain of command for implementing operational directives. This chain flows from the battalions, squadrons and ships through the respective hierarchy at multiple levels. Even at the very top of the ladder, at the rank of the C-in-Cs of each respective service, the chain ends up with the respective service chiefs and not the Chiefs of Staff Committee. These multiple levels of command and control not only create delays in decision making, it also creates challenges for joint operations, despite attempts over the years to establish laterally oriented ad-hoc organisations, which come into play on a need basis.

It has been seen in the previous section how China has been able to reduce the levels in the chain of command of their PLAAF

(PLA Air Force) establishment with the new systems that have been introduced. It is the theatre command which commands both offensive and defensive operations and the role of the PLAAF has been limited to centrally held assets which require allocation on a need basis. As a result, the theatre command and CMC cut across multiple links of the services and intermediate levels involved in the past. This has provided greater decentralisation of control with the theatre commander. It has also given the CMC more intimate control over military decision making.

A similar assessment in the case of the US indicates that geographical theatres like the Indo-Pacific Command exercise almost complete decentralised control. In the hierarchy, they are linked to the Secretary of Defense, who has the advice and support of the Joint Chairman of the Chiefs of Staff Committee, in an advisory role and also as the senior-most serving officers from the armed forces.

With this background, different options for the command-andcontrol structure in the Indian context could emerge on the premise that geographical theatre commands will soon be in place. Further, the office of the CDS and Permanent Chairman COSC are well established. We also have the office of the three Service Chiefs that will remain pivotal to the command-and-control setup.

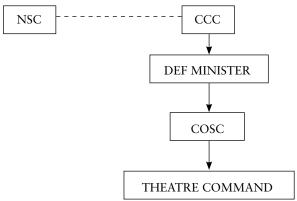
The first option that emerges is the Theatre-COSC-RM Model. This entails that the command and control of the theatres will flow from the theatres to the COSC, chaired by the CDS as the Permanent Chairman. This committee will have the benefit of an enlarged support structure built upon Headquarter Integrated Defence Staff (HQ IDS). This will be done by subsuming the operations, intelligence and operational logistics directorates (and any others needed) from the three services within HQ IDS to provide the necessary support base to the COSC. The COSC already has an operational role, which will enable it to oversee the coordination and conduct of operations. The COSC will provide the necessary inputs and recommendations to the RM, who will remain the final authority on behalf of the Cabinet Committee on Security (CCS) for decision making.

The second model is the Theatre Command-RM model. This entails a direct linkage between the theatre commands and the RM, with no intermediate authority. In such a case, the theatre commanders will have more powers delegated to them based on the directive issued for a certain theatre. It also implies that the RM and his support staff will have a more hands-on role. The person in the chair will also need to keep abreast of issues and events to enable the provision of decisions. For this purpose, the RM will be assisted by the Chairman of the COSC, which can include the service chiefs. In addition, any other functional commander or departmental head from the government can be invited for inputs. As an illustration, this could include the Director of the Intelligence Bureau, or the external intelligence agency. Other than support from the COSC, the CDS will continue to assist with allocation, sidestepping and coordination of resources. However, this will not entail a command function for the Chairman COSC. The difference between the two models is the presence and absence of an intervening layer for coordination, command and control. While the enlarged HQ IDS and COSC are available in both models, their role and scope of responsibility vary.

There are clear advantages and disadvantages of both models. In the first, the Permanent Chairman and COSC function as the planning, coordinating and overseeing body for all military functions. As a result, the Chairman is granted powers and functions with enlarged operational responsibility in comparison with what has been indicated at present. The COSC provides the necessary professional expertise and experience to stitch together the separate inputs that will emerge from different theatres. They also provide the Defence Minister the requisite staff support to ease decision making. Unlike the US system wherein the scope of theatres is relatively more independent, theatres in the case of India will remain far more closely associated for both operations and resources. This will perforce require an intermediary authority to ensure their seamless functioning as a whole. The disadvantage is that while the theatre commanders will continue to have overall responsibility of their geographical areas, the Permanent Chairman and the COSC will oversee this responsibility, thereby adding an additional layer of control. This model could suggest the negation of some intended

advantages that are envisaged in a decentralised model. However, it is important to associate these models in the Indian context and the realities of the existing system, with its inherent strengths and weaknesses. The existing circumstances and experience of stakeholders suggest that an intermediary coordinating authority in the form of the COSC remains important for ensuring a smooth changeover from the existing system (see Figure 2).

Figure 2: Proposed Chain of Command



The second option seems ideal given its past experience in countries like the US. However, it also comes with its limitations in the Indian context. Unlike systems in place in the US, which has witnessed their organisational structures mature over the decades, the Indian restructuring is at a nascent stage. The second option demands a very intimately involved political office, with the necessary support structure in place. It also needs theatre commands that have matured over a long period of time which allows them to function with a reasonable degree of independence. Further, unlike the US where theatres are independent in their mandate over an external geographical region, internally, there exists a close linkage, which demands swift switching of resources, integrated planning and the ability to lay down inter-theatre priorities. This requires the CDS or Chairman COSC to play a role that is more than merely coordination. The Chairman COSC emerges as the operational pivot, as also the hub of strategic planning and for successful decentralised implementation. It is in this context that the second option, however desirable, would not be practical in the foreseeable future. The structure that India is likely to put in place took decades for other countries to implement. It is best to give time to these changes to mature, prior to moving to a more decentralised system of operations. To that extent, the aim of a drastic reduction of layers within the chain of command may not materialise immediately upon the creation of theatre commands. However, this will be achieved to the extent by reducing the parallel command channels within individual services. These will collapse and theatres will be able to undertake decentralised command functions more efficiently. Further, on a day to day basis, the role of the COSC will remain in coordination, thereby allowing requisite freedom of functioning to the theatres.

In the past, there were apprehensions regarding the role of the Service Chiefs and their importance. It is practical to view envisaged changes from the perspective of changed structures, rather than from what importance the Chiefs held in the past. In the case of the latter, the standing of the appointment is bound to be perceived as diminished, which is not the objective of the reforms that are presently underway.

# Functional Commands: Case of Air Defence Command

While the unified geographical theatre commands will remain the focus of attention, an interlinked and affiliated structural evolution represents the functional commands. Functional commands serve the requirement of integrating services in relation to a specific role performed by an organisation in both war and peace. As an illustration, a functional setup could relate to logistics, training or even cyber and space.

One of the more immediate structures that are likely to emerge, as has repeatedly been indicated by the CDS, is the Air Defence Command. He are the further been stated by him that the command is likely to be headed by an Air Force officer and would include all long-range missiles and air defence assets. He wever, despite media reports regarding the establishment of an Air Defence Command by 8 October 2020, headquartered at Prayagraj, it evidently remains a work in progress. He This is possibly because of the challenges posed by the concept and its implementation.

This leads to a fundamental question: How does the creation of an Air Defence Command enhance the operational efficiency of the existing system?

There is a perspective emerging from a large number of experienced veterans which suggests that the Air Defence Command is unlikely to enhance the operational effectiveness of the armed forces. Further, it is contended that the existing system has emerged after decades of attempts at learning from best practices and improving upon limitations observed. As a result, an optimal structure has emerged between the Indian Air Force (IAF) and Indian Army (IA) on one hand and between the IAF and civil air traffic controllers on the other. Any attempt to change the status quo is bound to create challenges and may also lead to sub-optimal utilisation of resources.

Air Chief Marshal Arup Raha, former Chief of Air Staff, opines that the existing air defence resources of the country have a wide variety of assets to include surveillance radars, Integrated Air Command and Control Systems, surface to air missiles, AWACS, etc. In addition to the resources of the IAF, the IA has its own antiaircraft guns, missiles, radars, as does the Indian Navy (IN). He feels that differences emerge from the very concept of operations of different services. In the case of the IAF and the IA, this difference stems from the concept of mobilising assets and employment of reserves, which is a critical factor for the army. However, for the air force, both these factors are not a constraint, given the ease of switching resources and rapidity of deployment. He adds that the division of resources between air defence and offensive roles is not feasible in the Indian context, given the limited assets available. This is complicated by virtue of the fact that all aircraft with the exception of the Jaguar are multi-role and can be employed both for defensive and offensive operations. Raha fears that the inability to switch resources from the Air Defence Command during a lean period could result in their sub-optimal utilisation. Further, certain central assets like AWACS are also employed both for defensive and offensive missions, which will make their allocation complicated.148

Air Marshal Anil Chopra feels that countries with a much larger air fleet, like the US and China, have not gone in for an Air Defence Command. He rightfully adds that air space management and air space control remain a critical function both in peace and war. This requires maximising "the effectiveness of combat operations without adding undue restrictions and with minimal adverse impact on the capabilities of any component." Chopra writes that this role performed by the IAF, as the designated service, requires close coordination between air control, air traffic control and area air defence units. During the war, the employment of different assets including missiles, artillery, and Unmanned Aerial Vehicles (UAVs) makes the role of exercising this control all the more complicated. This responsibility has been fulfilled by the IAF over the years with distinction, and this has also been accompanied by the requisite experience to coordinate these activities.

Chopra adds that despite the attempt at integration, the distribution of air assets would lead to their suboptimal utilisation. Further, integrating radars, weapon systems and networks will produce yet another challenge, especially given the distinct systems being used by the services presently. And finally, distribution of fixed assets to commands will constrain the flexibility of air power.

In essence, the critique of the proposed Air Defence Command being envisaged emerges from challenges related to division of resources, the operational dissimilarities that exist between the services, challenges of integration of dissimilar systems and disturbing the existing role played by the IAF in the control of air space.

In contrast, Gp Capt. Khera feels that there are some reasons which often tend to get discussed in generalities, giving rise to widely held perceptions. However, in more specific terms, the creation of a unifying organisation like the Air Defence Command can reduce duplication in surveillance, communication and deployment of assets needed to cover a given area. The establishment of the command will not make a difference in the deployment of aerial assets. In addition, training requirements can be optimised which will further cut manpower, infrastructure and systems. 150

The Air Defence Command will also be able to undertake more efficient procurement, thereby avoiding duplication of effort and resources. It could also assist in bypassing the unfortunate reality of inter-services rivalry. Khera feels that "IACCS, Akash Teer and Trigun are three different systems developed by the services for the same task. It never made sense and these cannot communicate with each other. Such fiascos can be avoided with a single command looking after operational aspects and associated communication back bone,"151

He goes on to explain that under the existing circumstances, the army and the air force have their respective radars, which are deployed. The working hours of these systems are controlled by the services themselves. This leads to the possibility of either both operating at the same time or both being switched off with an overlap. This could lead to either duplication of coverage, or creation of gaps in areas being scanned at certain times. The existing procedure for operating radars requires a cooling time. This implies that unless this cooling period is synchronised between different entities within the army and the air force, gaps in coverage are very much feasible. This can be better coordinated by a single entity coordinating the operation of all the radars.

A similar challenge has emerged with regard to communication system procurement and deployment by the services. There have been instances wherein the communication equipment of the army and the air force does not work properly to communicate with each other. "This entails additional expenditure to make communication protocols. This slows down the process and makes it vulnerable." 152

The level of differentiation between the three services can be gauged from the very terminology that is employed for the same situation and circumstances. This can lead to misunderstanding and even fatalities. A unified command can reduce and eventually eliminate these differences in routine functioning, thereby creating common procedures and protocols.

Having seen the perspective emerging from seasoned practitioners, certain key issues emerge regarding the employment of air power, role of IAF both in peace and war and finally the limitations and advantages that a future Air Defence Command could create. In essence, any future system would be considered suitable for the task that is currently being performed by the IAF in conjunction with the air defence assets of the IA, while simultaneously addressing existing limitations. It would therefore need the following characteristics:

- A central coordinating agency that has the mandate and experience to remain as effective as the IAF has been for air space control and its management.
- The agency should also have the mandate to allocate and switch resources to ensure that no subordinate headquarter considers the assets once allocated as permanent.
- Retain the flexibility to react and adjust to fast-evolving combat circumstances that are a given in war, thereby overcoming the limitations of limited resources and common characteristics of assets for both offensive and air defence functions.

- Retain unity of control and coordination even as the unity of command is delegated to a subordinate headquarters, just like it is presently the case with air commands.
- Ensure better coordination and unified employment of assets from different services, as compared with what presently exists.
- Bring greater coordination in training, procurement, command, control and communications than is presently the case.

Meeting this wish list does seem to be a tall order. A comparison of four systems: the existing one; the option of having theatre commands undertake both offensive and air defence roles; responsibility of air defence and offensive operations being divided between theatres and Air Defence Command; and finally, a system where a central structure coordinates operations and resources while theatres have complete authority to command the assets, will be discussed.

The first option considers the retention of the existing model. It is evident that the present system despite maturing over the years and clearly proving its effectiveness both in peace and conflict scenarios, falls short on some aspects of joint functioning, procurement and coordination, as Khera has pointed out. Services and arms tend to perceive air defence responsibilities from their limited perspective and this is especially the case with the assets of the IA, which given the relatively limited role fulfilled, tend to remain localised in their deployment, at times leading to undesirable duplication of effort. A similar challenge has been noted in the employment of radars, which are not necessarily coordinated as part of a holistic deployment. Therefore, any discussion on alternative models under consideration must ensure the retention of existing strengths of the present system and build upon its constraints, which are largely related to structural faultlines that are a legacy of the past.

The second option divides the responsibility of offensive air operations and air defence between theatre commands and the Air Defence Command. This has the inherent advantage of better coordination of air defence radars and assets under one authority, thereby eliminating any gaps in surveillance that may have been there. It will also ensure that coordinated and consistent training and procurement procedures are followed. The unity of command for air defence will also eventually create a common communication backbone for seamless integration. However, the challenge of switching resources between multiple commanders at the apex level to include the Air Defence Commander and different theatre commands will remain a challenge. There will also be multiple agencies attempting to coordinate the same assets to execute operations. And finally, there will remain the need to create yet another coordinating agency to integrate the responsibilities of the Air Defence and theatre commands at the apex level on behalf of the Chairman COSC. Therefore, this model, while removing some anomalies, could introduce others instead. It will also lengthen the existing command and control chain, thereby negating some of the gains likely to be achieved.

The third option that emerges is that of geographical theatres themselves looking after both offensive and air defence requirements. When this option is compared with the previous ones - that of the existing system and the Air Defence Command with an active operational role, certain clear advantages emerge. Khera feels that the primary challenge for the Air Defence Command to succeed emerges from clarifying the responsibilities of the tasks at hand. Therefore, unless clear responsibility for the employment of air power is delineated, there is a distinct probability of suboptimal employment of air assets. The possibility of allocating air assets to theatres, as also keeping them centralised with the proposed Air Defence Command exists. This is with the proviso of allocating a certain number for air defence duties on a required basis. However, for a theatre commander, the potential of loss of territory will be real, since he would be responsible for a certain designated geographical area. Conversely, the Air Defence Command will not have a similar geographical area to protect. This leads to a variance in how assets in general and air assets, in particular, tend to get viewed by respective commanders. For the commander holding land, they contribute to its successful defence. For that is how victory or defeat is likely to be quantified. In contrast, the air commander does not hold land and therefore its potential loss does not emerge as his primary concern. He, therefore, finds it easier to focus on enemy air assets, strategic targets and air defence networks. These limitations should logically suggest the need for air assets to be placed with theatre commands instead of dividing these between the two entities.

However, the system of theatre commands handling both offensive and defence roles is not without its own limitations. This system will still need a structure that coordinates both air defence and offensive responsibilities between them. Allocation and switching of assets will also need to be fine-tuned. And finally, as Chopra indicates, there will be a need for a headquarter to manage and control air space both in peace and war. Therefore, the theatres commands alone cannot undertake this responsibility in isolation. Herein comes the requirement of a coordinating agency, which may function in a similar way as the current Air Headquarter.

The final option presents a hybrid model, which attempts to eliminate the limitations noted with previous models. This allows decentralised command of responsibilities for both air defence and offensive employment of air power along with assets of other services to joint theatre commands. Given the joint structure of theatre commands, unlike service-specific commands at present, theatres are likely to eliminate issues with interservice coordination that have come to the fore in the past. It will also facilitate a more cohesive and integrated deployment of surveillance equipment and their employment. This relates especially to the challenge of limited assets with India, which requires seamless switching between air defence and offensive roles. The theatres will be able to coordinate amongst themselves, just as air commands do at present. The presence of air defence specialists in each theatre will further facilitate this requirement.

Even as theatres undertake operations and coordinate within and beyond their geographical boundaries, the overall coordination of offensive operations, air defence, allocation and switching of resources, management of air control and the surveillance grid needs to be handled by one central agency. This role can be fulfilled by the Air Defence Command, which is in the process of being raised.

This command can also become the repository of special assets, held in limited numbers like AWACS, which can be employed on a need basis. The centrality of air control as a responsibility that the air headquarters fulfil today can be undertaken by the Air Defence Command. The joint configuration of the Air Defence Command will also improve procurement decisions in conjunction with the IAF and help coordinate training requirements. The Command can facilitate the interlinking of diverse command and control systems that presently exist within the three services. This coordinating role will obviate any dichotomy of multiple command functions. Further, it will reduce existing channels which include multiple commands from different services attempting to integrate their operations.

The solution lies in co-relating the limitations of each option and assessing the best-case scenario possible. The present system has ironed out coordination challenges over the years. This implies that whatever IAF commands could achieve in terms of coordination along with the army assets, the same can only improve with an integrated theatre command, where all assets are under a single commander. The limitation of the existing model resulted from the wastage, duplication and gaps that came about since services looked at common issues through their service-specific lens. This again can be resolved if all existing formations of the army, navy and air force get subsumed under individual theatres. This system meets the requirement of centralised control of air power and its coordination. Simultaneously, it allows the unity of operational command with greater cohesion between the three services, as compared with what exists at present.

A useful pointer in this regard emerges from the newly established model of theatre commands in the case of the People's Liberation Army Air Force (PLAAF) in the wake of military reforms which commenced in 2015-2016.

From a seven-military region (MR) structure, the Chinese military establishment was divided into five theatre commands. More specifically, from the perspective of the air force, a complete change was undertaken in the command and control setup. Unlike the past, services were made responsible for support functions that

included organising, manning and equipping units "whereas the theatre commands were tasked with combat operation command."153 The new chain of command, therefore, functioned from the theatre commands to the Central Military Commission (CMC).

As the newly designated 'war fighters' within the PLA structure, the theatre commanders will be responsible for conducting campaigns. And while the CMC will indubitably maintain strict control and authority over all five theatre commands should actual hostilities occur, it is the theatre commanders – rather than the service chiefs or the CMC departments - that will both wield the sword and shoulder the burden of planning and conducting operations. 154

There is little doubt that the Chinese military structure, including that of the PLAAF, was modelled upon the US system. Detractors rightfully argue that this model works ideally in a system which has adequate resources to distribute amongst different theatres, especially when these theatres are geographically spread, as is the case with the US. However, a contrarian argument suggests that given the inherent flexibility of the air force to switch resources, their cross-theatre mobility, especially in the Indian case, is as feasible as it was when the Air Headquarter managed the resources. That is unless theatre commanders are more rigid about shedding their assets, unlike the past. Something that the new system will undoubtedly ensure as part of the evolving structure.

The Chinese model also suggests that all potential redundancies in their structure have been removed by ensuring that the theatre commands have direct and immediate control over all assets. And by placing officers from the air force in every theatre, availability of technical inputs is also inherent to each command. It is noteworthy that the CMC now has greater control over military matters within the theatre, thereby ensuring that there is no gap between intentions and their implementation.

More specifically in relation to the organisation of air defence, the PLAAF restructured their air defence assets by bringing them under bases through the setup of brigades. In the process, Divisions

were done away with. These brigades include surface to air missiles, anti-aircraft guns and radars. Simultaneously, they were also responsible for coordinating training with their counterparts in the army and navy. Thus, the bases created to control all these assets.<sup>155</sup>

The only assets which continue to remain under the command of the PLAAF include the "special mission (intelligence, surveillance and reconnaissance) aviation units, one transport division, one transport and search and rescue brigade, as well as the airborne corps." <sup>156</sup>

When co-related to the Indian context, both the air force and army hold radars and surface to air missiles. Anti-Aircraft guns are primarily held by the army. While there is coordination between these units, they are not coordinated by one unified structure, which is now being attempted through the creation of the Air Defence Command.

In essence, the role envisaged for the Air Defence Command in the Indian context is shared by the PLAAF which continues to have some assets that are coordinated by it and the theatre commands, which are responsible for the coordination of air defence activities as well.

It would be useful to take an example based on a probable threat emerging and assessing the impact of options before planners. One, when a theatre is responsible for operational responsibilities, along with an Air Defence Command. And two, in the case of a system as it exists today.

Let us take the example of an enemy aircraft intrusion in the present scenario. In such a scenario, common assets, for both air defence and offensive role, are available to the commands. Since the airbases are responsible for coordinating the employment of different resources, orders will be passed through the Air Defence Direction Controllers (ADDC, which operate under Bases, which in turn are located within Command areas of responsibility) for a certain type of resources to halt or open fire (weapons tight or weapons-free). This coordination extends to the anti-aircraft guns and missile systems of the army. As an enemy aircraft approaches,

it will be detected, identified, intercepted and destroyed employing the best asset for the task at hand. The controllers will open or close the option to employ different assets. This includes the assets of the army. In case a situation develops which requires offensive action, the same assets can be employed without appreciable lag in time or decision-making cycles.

There is seamless hand-holding between different ADDCs and bases. Over the decades, the procedures, communication linkages and command chains have evolved to function with a degree of efficiency. "The entire system is digitally networked and rides on the Air Force Net (AFNET) and Integrated Air Command and Control System (IACCS). Army sensors are integrated, and air defence weapons are also controlled by the same system."157

However, this system is constrained by the fact that the radars and surveillance systems continue to operate with their servicespecific priorities. The systems of the IA focus more on what they see as their priority vulnerabilities. In contrast, the IAF looks towards their own visualisation of potential threats. This creates a system which, while operationally coordinated, is below the potential of the joint capabilities of the IA and IAF. As an illustration, the radar of the IA rather than being strung out along with the resources of the IAF, retains an inward priority, given that the vulnerabilities of the army remain well within the border in contrast with those of the air force, which are beyond.

In case an Air Defence Command is in place tasked with the function to coordinate operations, all air defence assets of theatres will be deployed in a synchronised manner. This will include assets of the IA, IAF and coastal systems of the IN. This will ensure no gaps are left in the radar coverage. The Command will also lay down guidelines for coordinating the timings of these assets to ensure that there is no downtime, unlike the present system. The layering of assets will also be established based on priorities and threats, unlike the present system wherein certain areas have multiple layers because of service-specific priorities coming into play. However, the requisite coordination protocols will need to be established for communication between theatre commands and the Air Defence Command with common elements like airbases and air traffic control.

These two illustrative case studies further elaborate upon the earlier discussion on options available for implementation. There is little doubt that the existing system has served the armed forces and the country well. However, there is also little denying that it does suffer from certain limitations. Therefore, the creation of an Air Defence Command must attempt to eliminate these during its creation rather than adding additional challenges.

In the past where challenges in coordination between and within services have come to the fore, it has led to major casualties that could have been avoided. The ongoing transformation must take into account some of these lessons while structural changes are underway.

Colonel Mandeep Singh, a former Air Defence gunner, provides a historical perspective of the employment of air defence assets in conflict, highlighting the challenges that were posed and takeaways from the same. One of the most technologically advanced organisations remains the US armed forces. However, despite this, their experience in Iraq with the employment of Patriot missiles and aircrafts did not produce desirable results. "In his last e-mail message home before he died, 30-year-old Navy pilot Lt. Nathan White described the challenges his F/A-18C could face over Iraq. One of his top concerns was avoiding American Patriot air defense missiles." The US continued to have concerns with technology and structures which did not have adequate safeguards, coordination and communication channels to avoid such incidents.

The challenges faced by the US pilots are not new. Decades earlier, during World War II, in support of Normandy landings in 1944, bombers were requisitioned to break through German positions. The deployment of ground forces in close proximity to the target area raised the possibility of fratricide. However, the plan was pushed forward and 1500 bombers were put into action. The dust raised by the bombing eventually led the bombers to stray from their path and resulted in the accidental death of more than 100 American ground soldiers, including a serving Lieutenant General.<sup>159</sup>

A worse disaster occurred during the landing by Patton at Sicily in 1943,160 despite the Army Anti-Aircraft gunners and Naval units being warned about the landing in C-47s carrying paratroopers. When the 2300 paratroopers in 144 C-47s reached close to their designated landing zone, they came under fire from their own guns. The landing zone had previously been bombed by German aircraft and this led to a case of mistaken identity. The eventual casualties included 229 paratroopers and 23 C-47s being shot down.

While one can discard these examples as those from a different era when communications and command and control systems were still comparatively primitive. But more recent examples like the shooting down of the MI-17 in February 2019 in the immediate aftermath of the Balakot strike clearly indicates that the fog of a conflict environment will continue to raise questions regarding the need to improve coordination between units and establishments involved in air defence functions. 161

It is evident that both systems have worked and failed at different stages of their evolution. It is also clear that neither is perfect without an accompanying procedural and structural ecosystem, which can iron out the challenges posed. The creation of an Air Defence Command presents multiple options. However, the factors that decide its role and employment must take into account the need to reduce existing challenges, even as the potential to add new ones is avoided.

# Functional Commands: Saving Costs & Enhancing Efficiency Integrated Logistics Command

The discussion regarding integration revolves around two major issues: efficiency and cost. And in a sense, both contribute to improving effectiveness in the designated role of the armed forces. This is especially the case when efficiency becomes a casualty as a result of cost overruns. Conversely, for an organisation that runs at optimal efficiency, an inflow of capital can lead to a gain in effectiveness. This could emerge from reaching the optimal size and/ or inducting equipment and/or technology to improve the ability to undertake responsibilities.

Unfortunately, unlike organisations that operate with an aim of generating profit, which becomes a measure of their efficiency and effectiveness, state institutions like the bureaucracy, police and more so the armed forces cannot be judged on similar parameters. The ability to fight and win is the foremost determinant of an institution like the armed forces to gauge effectiveness and success.

However, despite this functional challenge to measure efficiency, the concept of integration can be related to the armed forces since all organisations need to operate at optimal costs. In the case of the armed forces, this reflects in the ratio of revenue to capital expenditure, though with a big caveat – the operational environment of the armed forces and the nature of demands it places on revenue expenditure.

This challenge in the Indian context is more acute in the case of the Indian Army, than it is for the other two services – the Indian Navy and the Indian Air Force. The reasons are not difficult to gauge. Most armies tend to be manpower intensive, when compared with their counterparts. This stems from the character of warfighting

that the army represents in contrast with the navy and air force, which are primarily equipment intensive. And that too at a scale which makes that equipment the primary element in warfare. Be it an aircraft carrier or a fighter aircraft, the costs involved with their procurement often far outstretches the cost on manpower needed to operate it. This is not the case with a rifle, light machine gun or even a medium machine gun – weapons that constitute a vast majority of the fighting equipment percentage in the army.

When the reality of the Indian Army's operational environment is further related to this context, the situation becomes more complicated. An unresolved border stretching thousands of kilometres along both the western and northern frontiers, with the perpetual challenge of opportunistic occupation as witnessed in 1999 at Kargil and more recently in 2020 at Pangong Tso and beyond, makes the role of physical occupation of ground an inescapable reality. However, this reality does not suggest that the status quo is the best option, as has been indicated by the ongoing structural reforms within the armed forces. It also does not imply that both manpower reduction and retention of effectiveness find themselves at the opposite ends of the spectrum.

The conditions presented by terrain and live borders may demand a greater reliance on physical deployment of forces. And, this by no means suggests that technology is not important or cannot become a means for saving costs. However, unless technology employment reaches a threshold level, while it does enhance capability, it may not necessarily bring down costs in the operational domain. As an illustration, over the years a number of superior weapons like antimaterial rifles, equipment like radars and thermal imagers, networks to include satellite communications have all enhanced capability. However, they have also simultaneously raised the cost of creating operational establishments. The same goes for fighter aircrafts and aircraft carriers. Conversely, there is adequate potential within logistic support systems, procurement and technology induction procedures to save costs when compared to existing models. This is feasible through the process of integration, cutting on duplication and enhancing the efficiency of existing structures at play.

### **Lessons from Banking Sector Reforms**

One of the options adopted by organisations the world over and not only the armed forces is of mergers to cut redundancies, reduce costs and enhance efficiency. While their comparisons with the armed forces in terms of the divergent role performed by them is obvious and such evaluations will at best remain tenuous, however, there remains a distinct possibility to compare methods to cut duplication, procedural weaknesses and management functions to include financial management.

One of the recent attempts to recalibrate structural weaknesses and enhance efficiency in the Indian context has been seen in the banking sector. Over the years, the Public Sector space in banking had stagnated and both growth and efficiency were being adversely affected. Concurrent to the financial reforms in India, banking sector reforms were also envisaged. In 1991, the first Narasimhan Committee was established. The committee, amongst other recommendations, suggested structural change in the public sector banking space. It recommended that the "actual number of public sector banks need to be reduced. Three to four banks including SBI should be developed as international banks. Eight to ten banks having a nationwide presence should concentrate on the national and universal banking services. Local banks should concentrate on region specific banking."162 While newly established private banks aimed to address their niche markets and consumers, "Most PSBs follow roughly similar business models and many of them are also competing with each other in most market segments they are active in."163 The former Deputy Governor indicated that the "efficiency gains resulting from lower cost of services and higher quality of services is too attractive to ignore."164

From the banking perspective, mergers are neither new nor a rare occurrence. However, there are critical elements that are kept in mind while planning the same to ensure that the merger can lead to complementarity and strength accretion instead of contradiction and lower efficiencies. In other words, the mere process of a merger is not enough to ensure success, unless it is guided by a shared vision and shared end state. As Gandhi correctly says, "It has to be ensured

that mergers among two banks should not be seen as a fix to short term problems as faced by some PSBs. Merger may be useful only if it has strategic vision driven by synergy and creating value for both the banks." This is equally valid for the integration of the armed forces.

The nature of savings that accrued in some of these cases are indicative of the advantages of structural integration. State Bank of India (SBI) went in for a merger with its associated banks of erstwhile principalities like Travancore, Bikaner and Jaipur, Hyderabad, and Patiala. As a result of the merger and the resultant consolidation, SBI reduced "1,805 branches and rationalised 244 administrative offices. Staff expenses declined 2.34 per cent and overall employee count fell by 15,762 due to retirement despite 3,211 new additions. In all, the bank saved Rs 1,099 crore in the last financial year (2017-2018)"<sup>166</sup>

The merger of Bank of Baroda with Vijaya Bank and Dena Bank is expected to lead to similar economies of scale and reduction of duplication that existed at a number of levels and locations. The bank is expecting to reduce 800-900 branches, in addition to associated head offices at multiple levels. Over a period of five years, the merger of the three banks is likely to lead to a saving of approximately Rs 9,000 crore.

This co-relates to the envisaged integration that is underway within the armed forces. There is little doubt that training facilities, logistical support structures, headquarters and manning staff would benefit from merging entities. This will undoubtedly lead to reduction in numbers of personnel and establishments that presently provide similar service to the three wings of the armed forces.

# **Relevance of Specialist Consultants**

While in some areas the armed forces are best suited to lead the effort, in others they could potentially benefit from external consultancy support. This is especially relevant in the case where project management support is required to handle aspects like logistic support systems.

There is little doubt that the circumstances under which the armed forces operate are very different from those of their counterparts in civil. However, there is also little doubt that the procedural advancements, scale of product range, its variety and the supply chains that have been established by some companies are at least as complex and widespread as at least the peacetime deployment of the armed forces. In some cases, this has been facilitated through the expertise of specialist consultancy companies, which have guided this process from its inception to its implementation.

An interesting case study in this regard relates to the establishment of an online marketplace by the government which came about through the consultancy model, which facilitated the process through project management strengths inherent with the company.

The government undertakes large scale public procurement as part of its routine functioning. A four-year-old initiative undertaken saw the establishment of a procurement platform called GeM or Government e-Marketplace. The online platform has been established along with the Amazon online shopping site model, with the provision to procure millions of products ranging from cars to computers and from reams of paper to paper clips. This platform has brought some of the largest manufacturers together onto a single platform, thereby making government procurement more transparent, simple and cost-effective.

India spends about 18 per cent of gross domestic product on procurement but only about a quarter of it can be bought on the e-marketplace, as the rest includes highly specialised items such as defence weapons and aircraft. At present, only about US\$ 3.5 billion of the annual procurement is being done through the online marketplace, but Kumar thinks it can reach US\$ 100 billion in three to five years. <sup>169</sup> The CEO of GeM Talleen Kumar feels that a move from legacy systems could lead to a saving of about US\$ 10 billion, which could fund the government's health expenditure.

The platform is already being used by the armed forces for undertaking routine procurements. This has eased their day-to-day functioning, eliminated multiple layers, which often led to delays and at times even unwarranted discretion. In contrast, funds are allotted on the basis of authorisation of units and formations (as an example battalions and command headquarters). A unit is able to carry out a purchase and the amount spent from within the authorisation is transferred by the monetary coordination authority to the vendors. If this example is extrapolated to the envisaged joint logistic command for the armed forces, useful lessons can be drawn, even as obvious differences remain relevant given the operational realities.

### **Lessons from Amazon.com**

A study of major online retailers like Amazon is instructive in terms of supply chain management that has been put in place to enhance efficiency and reduce costs. This includes four levels of inventory management: procurement; positioning; order management and delivery. In each of these stages, Amazon has been successful in bringing a healthy mix of automation through the use of technology and manpower, depending upon the task at hand.

Without getting into the details of each of these stages in the case of Amazon, it would still be useful to better understand the logic of its functioning and attempt a co-relation with the armed forces in India. There are some very obvious elements that go into the process. The armed forces have a distinctly different procurement model, wherein contracts for procurement are signed and supplies are guaranteed over a specified period of time. While the G-e-M marketplace case study indicates an obvious possibility of changes and improvements, there is also a case for bringing in the role of an individual consumer, when it comes to personal clothing and equipment requirements. That is to say that just as salary is now credited into individual accounts, based on the life cycle concept, clothing items and equipment should also be managed by units directly to the central coordinating database to ensure the right size and fit. It also eliminates the need for slow and laborious processes undertaken to collate this demand at every subsequent level, thereby leading to repetitive and time-consuming work.

Based on the collective demands of units, ships or airbases, the establishment of logistic bases becomes the foremost requirement. In the case of Amazon, there are 493 warehouses worldwide. In addition, distribution centres are established "mostly near large metropolitan areas and other population centres, inventory is calculatedly spread among them to ensure that supply can always meet demand."170 Compare this with the logistic requirements of the armed forces. In the case of the navy, it is a specific number of ports which cater to the supply of logistic support to ships. For the air force, it is the airbases. In the case of the army, units and formations are more widespread. However, as the Amazon case study tells us, the number of locations and variety of parts and spares are not a challenge till the time these can be identified on the basis of a unique identification number, with the assistance of a photograph and related to the equipment with which it is used. However, the supply chain can certainly be better managed in case distribution centres can be so located that the travel time and target consumer is in relative proximity.

Given that the three services function on their own software for logistic support management, it would become the foremost requirement to bring them on a common platform. This can be chosen based on a similar logic as the banking system, wherein the most efficient and scalable option gets employed to merge the others into it. This implies that if for instance, the Naval logistic management model is the most efficient and advanced, then the Indian Army and Indian Air Force logistic data gets merged into it. While this may need some time and adjustment of individual fields within respective databases, however, this is perhaps a more efficient way to go about it rather than remaining on three different platforms, as is presently the case.

This merger of software and integration of supply management chains must also simultaneously indicate tangible benefits in terms of scale of procurement and savings in money and time in relation to distribution. For each such initiative, it is imperative that a multi-stage monitoring body must evaluate the intended targets for savings that have been identified as part of the project management model. This is where some initiatives tend to falter. The aim of such a move has to be clear in terms of its objective and end state. Is it to bring greater coordination? Is it to save money? Will it improve efficiencies through easier placement of demands, faster processing of such requests, improvement in planning inventories without necessarily holding too many stocks and at the same time avoiding running out of items at critical junctures?

All this is possible, given the obvious examples like Amazon that have been operating more complex and geographically dispersed models with ever increasing efficiency. A system like the one-day delivery service of Amazon is an illustration of demand forecasting, warehousing, processing, dispersal and delivery. While militaries do not need such time critical systems as a routine, however, the need to ramp up systems in emergencies can certainly become a learning experience from recent advances made by corporate giants in this field.

## **Challenges and Way Ahead**

The challenge for the military establishment to create a world-class logistic supply chain will emanate at a number of levels. For one, there is bound to emerge a comfort level with existing systems in place. Each service has spent years in an attempt to create their inhouse logistics system based on their needs and requirements. Any attempt to merge it with platforms and systems of other services will face resistance. The step is also likely to be challenged by a desire to undertake only incremental shifts, which will enable the new integrated system to just about deliver under the new circumstances. In contrast, it is best to understand that the emerging opportunity presents an option to make a quantum jump in existing efficiencies.

The services have increasingly been dealing with the private sector to support their logistic and even their operational requirements. The logistics support system can become yet another area for seeking professional guidance and support. While the inhouse team of the services will have to provide the existing and futuristic needs of the armed forces, the software and management teams can convert that into practise based on years of experience

of not only project management, but emerging benefits of big data management, Artificial Intelligence based systems to forecast demands and integration with a modern robotised warehouse setup coordinated and controlled from a central nerve centre.

The armed forces have been giving a serious thought to the concept of outsourcing, especially based on the recommendations of the Shekatkar Committee Report. It would be useful to assess the areas where outsourcing of delivery can be considered for the three services, especially in relation to more personalised goods and services. On 8 January 2021, Defence Minister Rajnath Singh launched an online portal for items that can be purchased from the Canteen Stores Department against a firm demand in case of major purchases.<sup>171</sup> This includes things like cars, washing machines, refrigerators and television sets. The facility brings the benefits of a digital online platform to the 45 lakh beneficiaries of the service – both in uniform and others who are a part of the serving civilian defence employee segment. This initiative indicates the possibilities associated with provisioning digital and online facilities to the armed forces - a measure which can be enlarged and expanded over time.

Apart from what the armed forces call "control stores" or sensitive equipment and its accessories, it is also possible to supply oils, lubricants and spares of a general nature for military vehicles by vendors. These are common items of consumption used outside the armed forces as well. This will not only save time and effort, it will also cut down on numerous channels and chains within the services, saving on costs as well.

One of the most important elements of any modernisation endeavour is the software platform and algorithm that runs it. The infrastructure in place and the physical components of the supply chain management system are controlled and coordinated by the software that gives instructions based on either consumer orders, or assessment of their demand over time through an AI-based predictive model. The example of Amazon is yet again a case in point. The system runs a global operation on the basis of an interlinked and seamless software that not only sells a very wide variety of products,

but also runs a streaming service, is into e-book publishing and distribution, offers cloud space and much more. 172

The limitation that a company like Amazon had was its growth from a small start-up and thereafter its rapid but organic scaling of the business model, despite the diversified interests it pursued. However, much like the armed forces, the integration of diverse businesses created similar challenges of integrating multiple platforms. This, as evidence suggests, was done well and arguably with a measure of success.

However, beyond the initial journey of the start-up that Jeff Bezos began in his garage, the vision was provided by the founder and thereafter supported by the very best professionals hired to take the initiative forward. And they chartered the course followed by the company. In a sense, this vision provided the operational philosophy that guided the expansion. This was also accompanied by strategic acquisitions over a period of time to gain the technical expertise for furthering the venture. However, at each stage, the vision that accompanied growth trajectory, remained the most critical element of the journey towards expansion and profit.

From the time Amazon began its journey to its present-day status, the impact of technology and its ability to enhance capability has expanded manifold. This implies that even as the broader vision may have remained intact, its manifestation in terms of implementation has enhanced to a level that was largely beyond the scope of imagination. This case study has an important lesson. It suggests that a company or organisation, which has sound and progressive vision, will meet its objectives because advancement in technology will eventually follow-up to provide possible solutions to challenges which might have seemed intractable to begin with.

How does this relate to the armed forces and the ongoing process of integration?

The progression in the logistic support management system within the armed forces has been relatively slow. While the fruits of digital age have facilitated varying degrees of automation, yet the pace and scale of upgradation have remained below par. This is especially true in terms of any joint endeavour to source, hold

and distribute common consumption items for the three services. Each individual service has created its logistic support model, which reflects substantial improvement over past systems in place. The practice of generating paper-based demands, which were initiated in multiple copies and moved up the supply chain in a labourious and time-consuming manner, has given way to a network which can instantaneously reflect the logistic requirements of any unit.

The Indian Army has the most complicated system in place amongst the three services. This is partly because of the wide variety of units and establishments, the varied terrain and conditions under which they have to be supported and the geographical spread involved, which in some cases presents issues of accessibility. After the first phase of logistic network automation in the Army, some of the major logistic establishments were connected. This will be followed up by phases that will attempt to bring other subordinate establishments and operational units into the grid as well. In other words, the process is underway to bring all logistic establishments on the same network along with its users.

In the meanwhile, despite the network that exists, demands continue to move through a hierarchical chain within the largest and arguably the most complex logistic network amongst the armed forces. This leads to validation at multiple stages, which is bound to have penalties in terms of time and effort. Further, despite automation, at best a mix of a push and pull model continues to be followed. This means that demands still need to be generated by user units to depots to get release of items by users, which is a pull model. In some cases, an attempt is underway to ensure that stores that relate to a life cycle concept like clothing are now making progression towards a push rather than a pull model. This implies that supplies are pushed forward automatically to units on the completion of designated life of items like clothing. Is there scope for improvement in this system that exists? Possibly yes.

A logistic support model, which can co-relate emerging consumption patterns with its supply chain management and push these supplies along the shortest route and in the shortest time frame predictably, is ideal for the users. However, any model that

functions to improve efficiency and reduce costs must also 'learn' to prioritise supplies amongst different priority users. As an illustration, users deployed in active area of operations along the borders will need to be given priority when compared to others in peace locations. Even amongst the troops in forward locations, some might need supplies more than others as they could be deployed in exposed locations. This implies that the administrator of the model should be able to provide additional computational inputs, with the proviso to change them overtime to deal with changing logistic supply patterns.

A similar example can be taken for weapons and equipment. Two units of a similar kind in an operational area may want to focus more on different parts of their inventory, given the circumstances of their deployment. A unit fighting terrorists may find greater urgency for item type A while the other in super high-altitude may instead have an immediate requirement for item B.

Further, a model can be computed with relative ease on the basis of consistent and continuous supply of stores. However, an additional element of complication needs to be catered for, when the supply of stores and equipment is intermittent and erratic, irrespective of the reasons involved. In the past, this has resulted due to failure of contracts and paucity of funds. This would require the logistic support model to cater for these brief pauses within the supply chain and resumption through a process of reprioritisation. This could also be a result of hostilities and weather conditions as has been experienced during conflicts and under difficult terrain conditions.

While the example of the G-e-M marketplace has been highlighted earlier, its wider adoption will need to be accompanied by improvements that at present can pose time and quality challenges. While the model enforces that a user must go to the marketplace for procurement, there continue to remain challenges in relation to sellers. The marketplace continues to see suppliers failing to meet their contractual obligations and fly by night operators in a bid to make quick profit prior to exiting the platform. It, therefore, remains equally important for the success of the platform to ensure

that supplier integrity can be gauged and ensured to further enhance the efficacy of the system.

This system is further challenged by the lowest bid system that continues to govern orders during the procurement process. The attempt to consistently lower costs has led some quality conscious companies to stay away from the existing system. Can there be a more realistic model which caters for both pricing and quality, while simultaneously weeding out poor quality options that tend to emerge in the system? There certainly is a need for one.

A fresh start is being attempted by creating logistic nodes at three locations in the country for the armed forces. This includes a tri-services hub at Mumbai, Guwahati and for the Andaman Nicobar Command. According to information in the open domain, lead services have been nominated for each of the nodes. The Army is responsible for Guwahati and the Andaman Nicobar Command and Navy for Mumbai. 173 These nodes will operate as test cases for future integration of logistics for the armed forces. The approach being taken for integrating logistics is clearly through a process of graduated enhancement rather than a complete overhaul of the existing system. This is evident with the logistic hubs. As a result, instead of going in for a unique software solution, the likely approach will witness an integration of three simultaneously running systems, followed by a bridge that connects and creates unique linkages. Eventually, this will lead to a composite system that will bring all three systems of the services into a single fold. In essence, the approach being followed is bottoms up rather than top-down.

While the advantages and disadvantages of both systems can be argued, this approach is likely to allow the process of integration to progress simultaneously, even as an iterative approach is followed for the support systems. This is in contrast with an all or nothing model, which would have delayed the process awaiting the completion of integration into theatres until software solutions and inventory management was ready for adoption.

Despite the obvious and substantive improvements that have come about in the logistic system, certain fundamental objectives need to be kept in mind while implementing it. First, any logistic model must confirm to the role and responsibility of the constituents that have been given the responsibility to execute the national security mandate. If there is a substantial shift in the character of war, then logically, it should or would also reflect in the logistic support system that is brought in place to support it. As will be discussed in more detail later in the book, the shift is obvious enough for the doctrine of at least some of the services to take note of it. Even if this shift does not demand a change, its possibility must be analysed prior to implementing the most substantive change that is underway in terms of integrating the logistics of the three services.

Simultaneously, no planning process can progress any further without taking into account the reality of an integrated model in the future. Evidently, this was not the case when the Computerised Inventory Control Project (CICP) of the Army and Integrated Logistics Management System of the Navy was planned and executed. This is borne by the fact that these software run on different platforms and have a completely independent operation at present. This is likely to make any future plans of integration a major challenge. While it is an ideal situation to bring all logistic support models on a single platform for the purpose of seamless integration, its feasibility can only be assessed by subject experts. The eventual assessment could also suggest other alternatives. This could include keeping services on existing platforms but linking them to enable cross-platform compatibility. A third option could seek to integrate common items that are consumed by the three services in the initial phase, even as the others remain on service-specific databases with inter-linkages. However, over time, and perhaps in a phased manner, linkages may need to be created to allow commonality of platform and its upgradation and improvement. It will also become imperative for a joint logistic organisation to handle a common database for all the three services rather than three individual ones with varying degree of personality quirks that each may have evolved with.

The existing system in the Army, given its state of evolution, continues to duplicate manual and automated efforts in certain

domains of the logistic support system. Over time, once the system stabilises, the shift to an automated system will become complete. However, the ongoing process raises challenges related to training support staff on both models. It also raises issues regarding continuing to rely on staff that does not specialise in complex modern systems. In future when the complete logistics support system gets fully automated and parameters of the kind that have been discussed need to be constantly fed into it, there might arise the need for greater understanding and specialisation to ensure its optimal utilisation.

There has been a steady shift towards employment of external or private sourcing of goods for the armed forces instead of only relying on organisations like Ordnance Factories. This trend is likely to further enhance the share of private sector participation in defence supplies. The shift will facilitate competition, which in turn will lower prices and enhance quality. This would possibly leave only supply of controlled stores like weapons and ammunition with captive manufacturing organisations of the government. This shift will require the integration of an external supply chain with the internal demand and supply mechanism that presently remains in place. In other words, the logistic intranet that connects the internal consumer and supply agencies will need to seamlessly connect with external suppliers.

The integration of these agencies will also provide the opportunity to take the predominantly demand driven system to a supply optimised operation. And even as this push model replaces the pull model, it will also incorporate the strengths and capacities of external support mechanisms. This will include the warehousing capacities of suppliers, which may not need replication within the services. Similarly, the existing transportation systems being employed by such external private companies could supplement or even replace the internal mobility systems, thereby reducing duplication and costs. At present, the central stocking organisations hold stocks for a certain duration to ensure continuity of supplies. The incorporation of external private suppliers will allow and even facilitate the reduction of this overhead over time.

### Al Blockchain and Big Data

As the system matures, which will clearly take time, the vision that drives the integration must simultaneously continue to guide the process. There can be a number of options that can be adopted. However, the scope and scale of work must always allow for technological advancements to continuously support and improve the system. With specific reference to the logistics support system of the armed forces, there are emerging technologies that can have a far-reaching impact on costs, quality of delivery and enhancement of operational efficiency.

Three technologies are having an impact that few thought possible some years back. These are big data analytics, blockchain technology and artificial intelligence. Combine the three and these technologies have the collective ability to revolutionise a number of areas and this includes logistics support management too.

It would be useful to start with Blockchain as a technology. "Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. An asset can be tangible (a house, car, cash, land) or intangible (intellectual property, patents, copyrights, branding). Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and cutting costs for all involved." The key characteristics of the technology include a distributed ledger, immutable records and smart contracts.

Blockchain technology ensures greater transparency of actions being initiated in any form of system. It also reduces the potential and possibility of fraud and cyber interference. This ensures security. In addition, Blockchain eliminates duplication and unwarranted repeated validation of records. The system is also practically independent of increasing volume of transactions, thereby making it more scalable and robust.

The system functions on the basis of each transaction being recorded as a block. This is further linked with the one ahead and after it. The time of this transaction is recorded, as is every subsequent transaction by subsequent intervening parties. However, since the blocks remain securely linked together, their position cannot

be altered. This creates an irreversible chain with each transaction reinforcing and securing the previous data and a ledger that is visible to the network based on preferences set by a user.

How does this provide advantages over the existing logistics systems that are in use, not only within the armed forces but also beyond?

The existing system finds movement of goods through multiple transactions involving multiple companies, agencies and individuals. In a best-case scenario, the government agency – in this case, the armed forces, could employ a joint logistics system. However, this still does not discount the fact that companies and individuals beyond this system will continue to operate in a manner and in time periods that will remain opaque to the consumer, i.e. the armed forces and within the armed forces the units which are the ultimate recipient of the intended goods. As has been discussed earlier, users transacting on a network also remain unsure of the source of the goods, standing of the companies which are involved in its production and supply, as also the conditions under which these finally reach the consumer. This is especially of relevance in terms of food supplies and perishable goods.

Blockchain technology has the potential to create an interlinking network, which adds this transparency to the logistics support system. It would perhaps be best to illustrate this with the help of an example.

Amongst the variety of stores bought and moved within the logistic supply chain of the armed forces are medicines. Understandably, these are produced and procured from vendors beyond government institutions. It implies that the supply chain not only involves establishments within the armed forces, but outside this closed-loop as well. This is not only peculiar for medicines, but also for a large variety of spare parts for vehicles, fuel, oil, lubricants, items of food and even equipment like radio sets.

However, medicine raises an additional challenge of authenticity that continues to plague the supply chain even beyond the armed forces.<sup>176</sup> The movement of drugs commences from the factory where these are produced, transported to warehouses of the company.

Thereafter, these move to distributors, who fill tenders to supply the drugs to the armed forces. After the supply order is given, the drugs are taken over by the procurement agency. Thereafter commences the in-house movement of drugs to various hospitals for its distribution or delivery. In this complete process, there is little control of even information with the procurement agency about the production of drugs, authenticity of the production facility, nature of storage facilities used for housing the drugs, quality of transportation and its duration, every subsequent stage at which it reaches and the final arrival at the hospital and its administration.

All this can be built into the logistic supply chain facilitated by the blockchain model. An initiative by major transportation and software companies in the recent past provides an option that can not only overcome the challenges associated with counterfeiting of medicines, but also track its journey thereafter. 177

The process commences with giving each unit a serial number. This links it with its batch, origin and expiry date. This enables the tracking of all these parameters of a drug as also its movement thereafter. As a result, the customer can not only trace the origin of the drug, but also its transportation cycle. The entire system is powered by blockchain technology. The scale of the model allowed the processing of seven billion unique serial numbers and 1,500 transactions per second.<sup>178</sup> This experience is valuable not only for drugs but also for other perishable items like fresh food and even tinned items for troops deployed in far-flung areas of the country. What is important to note here is the concept of the operation, and thereafter tweaks can be made to the system to ensure its applicability for other products.

The Blockchain system, given the kind of transparency it provides and prevents any alteration of records, makes redundant the need for repeated verification and checks that are presently employed at multiple levels. It can also assist in more efficient placement of goods along the supply chain and within warehouses spread across the country. This would practically create a seamless network of resources despite these not being located at a centralised location. It would also make it that much more effective for the decisionmaking hierarchy to plan for their operational logistics.

There could be understandable concerns regarding the interlinking of the internal networks of the armed forces and those operated by commercial entities. This can be overcome by establishing a logistics intranet as part of the wider network of the armed forces. It can be linked through very limited and specific permissions to the extranet employed by commercial organisations. This would provide seamless connectivity and yet the requisite security desirable.

The second element that must get incorporated in any future logistics supply management system is AI. As systems continue to get automated, there is likely to be an unparalleled volume of data produced. This will continue to grow over time. It will also provide the potential to create "intelligent" AI-driven systems that can mimic human decision-making abilities based on its data processing capability.

Much like the blockchain management system, AI also creates distinct advantages over a simple automated system, of the kind that exists presently. Basic automation allows a system to work as it has been programmed to do. As a result, it will reflect the very same limitations of the system that were associated with the inherent or initial constraints of the system. In contrast, an AI-based system has the ability to derive solutions even though these have not been programmed as the system "learns" on the basis of data it processes.

A recent Manohar Parrikar IDSA publication by Brigadier Ashish Chhibbar delves into the subject in depth. Chhibbar explains that "in a non AI computer programme, there is an input which is fed into the computer and an output is derived after the algorithm analyses the input as per a given set of instructions."<sup>179</sup> He contrasts this with an AI-driven programme. "For starters, it is not necessary that for the same input you will get the same output, every time. AI tries to solve problems which are NP (Nondeterministic Polynomial) hard and therefore rather than finding an exact solution, AI endeavours to use large quantities of data and probability to find good solutions."<sup>180</sup>

How does this capability relate to military logistics? In order to relate AI to military logistics, it is important to not only consider routine peace time supply of goods, but also and more importantly keeping troops supplied during combat conditions. This raises the challenge of dealing with uncertainty and unpredictability, which is an antithesis to data generated predictability. Therefore, even as AI is incorporated over time with support from data generated during both peace and wartime conditions, scope for manual intervention and calibration will have to remain inherent in systems that support logistics operations for the military.

This uncertainty emerges from the unpredictability of battlefield changes that emerge without warning. It is also related to destruction of stocks that may have been held to support forces over a certain period of time. The very divergent nature of military operations, which further varies across sectors can also demand tailor-made solutions. The redundancy of the logistic supply chain itself becomes an important factor in this logistics support chain. And finally, it may not be entirely feasible to rely on commercial integration, which works in peace time but would come under stress during warlike conditions.

However, despite this limitation, there are a number of areas where AI can be employed to facilitate and improve logistics management. This includes "stocking and inventory management, supply chain management, preventive maintenance, medical and casualty evacuation, transportation, including driverless convoys, and formulation of logistic plans and orders."181

One of the areas of logistic management that can be addressed in an integrated system includes predictive maintenance and repair. A system that is connected to the requisite sensors, which can monitor the health of the equipment, can maintain access on a real-time basis, thereby forewarning against failures and in case of a failure facilitating early repair.182

The cognitive skills model is not new and has been in use for some years in an attempt to pre-empt machine failure. The Watson trail programme in the US Army "predicted and diagnosed equipment component failures, and then prescribed maintenance actions for technicians. Commanders could view the status of a unit so they could make better-informed decisions. They were alerted up to 60 days before a vehicle would break down. Additionally, Watson helped technicians and logisticians see which parts to order and what to keep in stock." <sup>183</sup>

The challenges of an integrated online procurement system were discussed earlier, given the questionable credentials of some vendors. While Blockchain is a means to guard against such challenges, as discussed earlier, AI and machine learning has also been employed for similar purposes by organisations like the US Defence Logistics Agency.<sup>184</sup>

A number of similar initiatives can be listed where AI can play a major role. However, a critical factor for its success remains the ability to feed the requisite data sets and thereafter creating the algorithm to exploit it. While the former is a painstaking process that is time consuming and manpower intensive, the latter requires high calibre technological ability to execute. In either case, these are endeavours which are best planned and executed at a time when systemic transformation of the kind associated with the joint logistic command is being considered. When the process of integrating the databases of the armed forces commences, it must ideally be accompanied by the incorporation of an AI-based and Blockchain powered system.

A critical aspect of such a system would be the initial data capturing process and ideally to place it as part of a cloud, which enables data to be accessed across platforms.

Both Blockchain and AI can obviate the challenges associated with handling large volumes of data, which is bound to become integral to all future logistic systems. AI can be facilitated by creating the ability of machine learning within its larger ambit. However, unless a broad framework and a plan guide the process of all three, a system, including a logistics system will either remain dumb or only partially smart, but never really intelligent. And there is no better time to plan and incorporate this initiative than during the ongoing transformation process.

# Linkage Between Structural Changes and Doctrinal Thought

A number of structural reforms have been undertaken by the government over the last few years, including the establishment of the Defence Planning Committee, creation of the Cyber and Space Agencies, as well as the Armed Forces Special Operations Division. More recently, this has been followed up with far reaching initiatives to include the establishment of the Department of Military Affairs and the appointment of the Chief of Defence Staff (CDS). The CDS, as part of his mandate, has also been given the responsibility of restructuring military commands, including the establishment of theatre commands over a three-year period.

However, even as these reforms are taken to their logical conclusion, the question that accompanies them is: Can structural reforms be undertaken or should structural reforms of the scale envisaged be undertaken in the absence of a doctrine articulated in definitive terms? While it can be argued that the absence of a doctrine or a strategy in the public domain is not the same as not having one at all. However, there is no escaping the fact that since situations do not necessarily emerge along predictable lines, its absence makes the task of responding or planning for them that much more difficult.

Further, as countries emerge to play a more responsible, decisive and impactful role in the strategic domain, the articulation of such documents is an important exercise in strategic communications. It helps convey the intent and world view of a government, which can serve the purpose of deterring adversaries in ways similar to how the size and capability of the armed forces potentially can.

Doctrines also serve the purpose of providing a long-term perspective for the country and the armed forces. This in turn assists in creating capabilities. And capabilities are what make structures effective.

The emphasis on doctrines and their importance is not merely a subject of discussion in think-tanks and academic circles. It's importance and relevance are fully realised by the military itself. The Directorate of Doctrine at Headquarters Integrated Defence Staff (IDS), New Delhi has brought out a primer to articulate their understanding of doctrines as also its importance and relevance. The Headquarter, which is responsible for writing and release of all joint doctrines and strategies for the armed forces, acknowledges the relation of a doctrine in the development of the national security strategy as well as the joint strategy for the armed forces. A chart which describes doctrinal flow is useful in this regard.

### HOW A MILITARY DOCTRINE FLOWS?

NATIONAL VISION
NATIONAL AIM
NATIONAL INTERESTS
NATIONAL SECURITY OBJECTIVES
NATIONAL SECURITY POLICY
NATIONAL SECURITY STRATEGY
(Underpinned by National Security Doctrine)
NATIONAL MILITARY OBJECTIVES
RM's OP DIRECTIVE
JOINT MILITARY/ARMED FORCES STRATEGY
(Underpinned by Joint Armed Forces Doctrine)
MILITARY STRATEGY OF INDIVIDUAL SERVICES
(Underpinned by Services Doctrine)

Source: Directorate of Doctrine Training and Doctrine Division HQ Integrated Defence Staff, New Delhi<sup>185</sup>

The chart clearly indicates that at each level where creation of strategies is envisaged, it is closely linked with existing doctrines, which provide the necessary reference and guidance for the same. The IDS document also describes at length the importance of a doctrine and the purpose it is required to fulfil. A doctrine is a "reference/guidance". It also serves the purpose of "strategic signalling/articulation to the adversaries". A doctrine maintains a "record of distilled wisdom" and it serves as a "building block/ intellectual foundation" for policies and strategies. 186

If this is indeed the case and the levels at which doctrinal guidance is expected includes national, military and services, then it does not come as a surprise that the absence of a doctrinal guidance has also led to the non-availability of strategies at the highest level. This is especially the case for a national security strategy and a defence strategy.

This raises a question regarding the need and purpose for such articulation for policy makers, and the impact of its absence. Further, and more specifically linked with this section, is the question: How does it relate to the process of achieving enhanced jointness not only within the armed forces but also amongst national policy-making structures.

The provision of national security guidance through a doctrine links the responsibility of military commanders to the political leadership. When the role and responsibility of both are dissected as part of their larger role within the affairs of the state, the potential impact of the absence of military guidance comes to the fore.

Samuel Huntington suggests that there exists a division of labour between the military professional and the political leaders. Prior to the professionalisation of the profession of arms, the same person could undertake both responsibilities, however, this is no longer the case. Now, "he is equally expert in both the constant and variable aspects of military science". And "it is in this area within which the statesman must accept the judgements of the military professional".187

According to Huntington, politics deals with the goals of state policy. It is beyond the goals of military competence. And it is important for the military to remain politically neutral. He adds, "The area of military science is subordinate to, and yet independent of, the area of politics. Just like war serves the ends of politics, the military profession serves the ends of the state." And most importantly, "The military man has the right to expect political guidance from the statesman." 188

It can be contended that political guidance from the statesman can always be provided without necessarily linking it with a formal written doctrine or a national security strategy in the public domain. However, there is also little denying that the process, procedure and precedence of placing such documents at regular intervals in the public domain, assists in wider dissemination of the national vision, it institutionalises the process to a large extent and creates a sense of endurance that can identify both shifts and continuity over a period of time.

The failure to do so forces the military to second guess the political leadership. In doing so, they step into a domain which is not familiar to them. Worse, military leaders are not trained to take on such responsibilities, especially given the limited inputs they are likely to receive, unlike the political leadership, during the decision-making process. Conversely, if the military leadership takes it upon themselves to take over the mantle of the political leadership, the results can be similarly disastrous. The experience of India and Pakistan during the Kargil conflict provides an example of the positives of an involved political leadership in the case of India, which provided strategic direction and conversely the other side in Pakistan, disregarded national leadership in the decision-making cycle. The impact of this situational variation in both countries is a case study that deserves closer assessment to better understand the importance of political involvement in national security and professional military leadership fulfilling their respective responsibilities.

The last armed conflict that India fought was in 1999 at Kargil, after Pakistan intruded into Indian territory during the winter months. Over the years, as a convention, forced by extreme inhospitable conditions, both sides vacated certain posts which would become climatically untenable, only to reoccupy them at the commencement

of the summer months. However, Pakistan broke this convention in order to seek military advantage. They occupied posts on the Indian sides by stealth. Hostilities began on 3 May 1999, just a year after both countries had tested their nuclear weapons. During the course of regular interaction between the senior military leadership and the political leaders, professional military advice was rendered to help shape the national response on the Indian side. At the behest of the army, this included the use of air power, with the Air Force indicating reservations on the same. Unlike this divided opinion, all services were in favour of crossing the Line of Control (LoC) to undertake military operations. 189 The political leadership continued to assess these recommendations and allowed the employment of air power from 26 May 1999, earlier having refused permission on 18 May. However, in their wisdom, and as events later proved justifiably, permission was not granted to cross the LoC to undertake operations of both the army and air force.<sup>190</sup>

This is a classic case of division of responsibility between the military and political leadership. It also illustrated how recommendations that were considered justified by the uniformed leadership, given the immediate operational requirement, were moderated by the political leadership, on the basis of additional inputs and the larger implications of the decision.

Interestingly, the result was quite the opposite on the other side of the LoC in Pakistan. A military quartet not only planned and executed the misadventure without keeping the political leadership in the loop, they also kept other services and senior military leaders in the dark, till it became too late to step back. <sup>191</sup> This not only had a severe debilitating impact on the planning process within the armed forces, but also embarrassed the country diplomatically.

It is in the context of actions of the kind displayed by Pakistan's military elite during the Kargil conflict that the need for military professionals to detach their professionalism from politics has been highlighted.

Politics is beyond the scope of military competence, and the participation of military officers in politics undermines their professionalism, curtailing their professional competence, dividing

the profession against itself and substituting extraneous values for professional values. The military officer must remain neutral politically. 192

The traditional division of responsibility between the military, diplomatic and political leaders was not only short-circuited by Gen Musharraf and his coterie, the entire process was also rendered ineffectual.

Kargil and before that operations in Sri Lanka, Maldives and humanitarian assistance initiatives suggest that the Indian armed forces have performed admirably during times of crises with the active involvement of political leadership at the highest level. However, this relative success cannot be termed as a best practice as this was more a case of successful crisis management, rather than being a part of a larger plan.

It is in this context that the importance of strategic direction in the form of a National Security Strategy and a Defence Policy needs to be emphasised. Not only do these documents provide an overarching perception of challenges and threats, they also enumerate priorities which can assist in building capabilities by the armed forces. The formulation of such guidance is therefore not only essential, its absence can adversely affect decision-making and operational effectiveness.

Some might ascribe the absence of a public national strategy as part of a deliberate decision. Brig Gurmeet Kanwal observed that policy planners have usually avoided articulating such policies in public. He adds, "Perhaps this reticence owes its origins to an innate sense of refraining from hurting the sensibilities of India's adversaries and neighbours." Kanwal quotes K. Subrahmanyam, who is particularly blunt in his view.

It is now well recognised all over the world that India does not have a tradition of strategic thinking ... mainly due to the incapacity of our political leaders and top civil servants to take a long-term view of national security. This is compounded by their consequent failure in giving a lead to the armed forces in preparing the country to face its long-term need for defence preparedness.<sup>194</sup>

Interestingly, Kanwal's suspicion is confirmed when the Defence Secretary went on record while deposing in front of the 10th Lok Sabha Standing Committee on Defence (1995-96) and stated, even while a policy existed, that it was not written down as a separate document. He added, "As a matter of policy we have not published such a document and the Government has not been in favour of publishing a separate document ... Non-existence of a document does not mean in any way non-existence of policy."195

The statement indicates the absence of a document and, by implication, admits the absence of even a classified national security strategy, which may not be in the public domain. While the existence of a policy is confirmed, at the same time there are no indications to suggest the employment of structured procedures that facilitate the assessment and analysis of long-term perspectives on national security or defence planning.

The policy of not publishing a separate document, as acknowledged by the Defence Secretary, has led to individual services publishing their own respective doctrines and strategies, which incidentally predate the joint doctrine published by Headquarter Integrated Defence Staff (IDS). While the Naval Maritime Doctrine was published in 2009, the Indian Army did so in 2004, with the first Indian Army Doctrine and the Air Force following up with their documents in 2012. 196 The joint doctrine finally came in 2017. 197 Even when it did, the policy of adopting the lowest common denominator acceptable to all services was evident from the contents. The doctrine provided little direction and guidance and unfortunately read more like a primer. The reasons were not difficult to fathom. Repeated drafts were diluted over time as a result of observations by individual services regarding the content, ultimately leading to the publication of a document which actually said little. This happened despite the fact that individual service documents were drafted well and clearly outlined the threats and challenges being faced and the approach towards dealing with them.

Irrespective of whether the anomaly of limited doctrinal guidance at the apex level is a result of a well thought out policy or hesitation to publicly articulate country-specific policies, the fact remains that its absence has remained a constraint for efficient defence planning procedures and laying down priorities on the basis of capability development objectives, which must flow from a national security strategy.

The doctrinal thought of the armed forces is bound to have a major impact on any restructuring effort that is undertaken by them. The Joint Doctrine of 2017, released by Headquarters IDS under the supervision of the Chairman Chiefs of Staff Committee (COSC), provides a limited perspective of the conflict scenario, which is likely to guide military actions in the Indian context. The only indication of future warfighting that it provides states, "The character of future conflicts is likely to be ambiguous, uncertain, short, swift, lethal, intense, precise, non-linear, unrestricted, unpredictable and hybrid." 198

Unfortunately, there is no further elaboration of this sentence, which within its ambit encompasses a number of different elements, which can at times also be contradictory to each other. As an illustration, ambiguous, uncertain, non-linear, unrestricted and unpredictable conflicts are a sound characterisation of hybrid wars. However, this may be at odds with a short, swift, intense and precise local conflict, which too is feasible in the Indian context. Both these scenarios require a different understanding, preparation, resources and constituents that would get involved and a methodology to implement it. And in the context of this publication, structures are needed too, to undertake the necessary mandate.

Despite this constraint, if it is presumed that the participation of the services in the exercise of writing the doctrine confirms a common understanding, in that case, this should reflect in the individual doctrines of the armed forces themselves.

The Basic Doctrine of the Indian Air Force 2012 elaborates upon the threat perception and nature of operations likely to be undertaken. The doctrine discusses in detail the different types of operations for which air power can be employed ranging from conventional to sub-conventional. However, it is evident from the IAF's air strategy, which encompasses counter-air campaigns, counter surface force campaigns, strategic air campaigns and combat enabling operations

that the focus remains primarily on conventional warfare, in which air power is employed in the traditional sense. As an illustration, the doctrine says that "control of air should be the first priority for air forces. This permits air forces to operate more effectively and denies the same to the enemy."199 This prioritisation does not cater to the changing character of conflicts that the joint doctrine emphasises upon. The war that is being envisaged by the Air Force doctrine may never be fought in its former manifestation. Further, while the doctrine talks about joint operations with the other services, it is quite evident from the doctrine that it has been conceived, written and circulated as a standalone document, irrespective of how the other two services envisaged the same operations. This is not peculiar to this document alone. It remains a recurring element of each of the service doctrines/strategy.

The Indian Maritime Security Strategy 2016 in its foreword itself visualises the 21st century as the 'Century of the Seas', clearly indicating the pre-eminent role that the Navy is likely to play in the foreseeable future.<sup>200</sup> In terms of the major changes having an impact on the geostrategic environment, the document identifies that emergence of the Indo-Pacific and non-traditional threats that are likely to have a profound impact in the maritime arena.<sup>201</sup>

The Maritime Security Strategy has clearly been written with a Naval perspective, as is evident from the aims and objectives listed as part of "India's Maritime Security." This includes shaping a favourable and positive maritime environment, protection of coastal and offshore assets against attacks and maintenance of force levels that can meet India's security requirements.<sup>202</sup> However, the strategy does not adequately discuss the role of India's maritime power to influence and impact security challenges along the land borders areas that have been the focus of attention for decades. This is especially relevant since India enjoys a favourable naval balance with potential competitors - both Pakistan and China, especially in the Indian Ocean Region (IOR). Similarly, while the strategy does speak of the challenges related to hybrid and asymmetric wars, however, it restricts actions largely to the maritime domain. This is yet another indicator of the document confining itself to its core area of operations. It does not venture into the larger arena of security challenges as part of the wider national strategy. The document reinforces what the Navy does best and most often. However, in doing so, it remains safely within its comfort zone.

The most recent document to emerge is the Indian Army's Land Warfare Doctrine of 2018. This doctrine focuses on challenges that have come to define India's security dilemma, including war in the Grey Zone and Hybrid Warfare.<sup>203</sup> However, despite reinforcing the same at length, the doctrine essentially remains focussed on the role of the army. As an illustration, the responsibility for land warfare does not rest merely with the army. However, the doctrine says in no uncertain terms that "enhancing capabilities to meet the emerging contours of conflict in a multi-front environment mandate the Indian Army to be prepared for techno-centric combat by imbibing technology, utilising human resources efficiently, ensuring optimal utilisation of the defined budget for force modernisation and further enhancing joint and integrated operations." The question that must be raised here is: Is land warfare primarily a concern of the army? And since the answer is a resounding no, the limitations of the document become apparent. Each of the responsibilities listed as part of the future security scenarios on land is as much the responsibility of the Indian Navy and Indian Air Force, as it is of the Indian Army. And the same is applicable for air and high seas operations.

All three service doctrines/strategies are fine standalone documents. But their limitation lies in the fact that they have not evolved from a comprehensive joint doctrine which lays down the wide conceptual ambit for the documents to derive their moorings from. And since the services prefer to function more often within their own comfort zones, their foundational documents reflect this reality. While the land warfare doctrine does say that it should be read in conjunction with the Joint Doctrine of 2017, the fact remains that the fountainhead is far too diffused to provide a joint direction to the three services.

Under the circumstances where a written National Security Strategy and Defence Strategy or Doctrine is absent, can the armed forces undertake a meaningful restructuring, given that their doctrinal understanding and strategies could well be pulling in different directions?

The Indian Armed Forces are not an isolated example of this reality. Earlier, similar deep differences within the armed forces in relation to their attempts at restructuring have been seen that in the US as well. Therefore, having differences of opinion is neither abnormal nor a major challenge. However, when such differences exist and there is inadequate strategic guidance to unify divergent thoughts, however flawed it may seem, the very process of restructuring becomes a bigger challenge. This has further been accentuated by the weak foundation laid by the Joint Doctrine of 2017.

So, what is the way forward for establishing a common thought process for the armed forces? The answer lies in coming up with a joint operational philosophy at the very least, which can become the foundational source for undertaking to restructure thereupon. This must thereafter be followed up with a joint doctrine which becomes a realistic joint guidance for the three services. And if the services are not in a position to come up with such a document, then perhaps it is time for the CDS to engage with experts beyond the services to undertake the responsibility.

Simultaneously, it is time for independent guidance at the apex level for national security and defence, which can fill the existing long void. The services have for far too long continued to operate on the basis of their perception of strategic guidance evolved from speeches and press releases. While this has its value, however, it cannot become a substitute for a formal policy guideline. And given the wide-ranging process of restructuring that is being undertaken by the defence forces, the time is opportune for such an initiative.

If the services and the defence establishment have been able to continue without a national security strategy or defence doctrine so far, why is there a need for it now? As has been reinforced earlier, the need for a national security strategy and defence doctrine has always been highlighted and reinforced over the years. However, unlike the past when services were relatively more independent in their planning and execution of their responsibilities, this reality will undergo a major change with the ongoing integration. And it is thus important to explain how and why.

While the chain of command of the envisaged security establishment is not clear as yet. However, the trajectory of its possible architecture is likely to emerge as discussed earlier with minor changes. This implies that unlike the past when the service heads could create and implement relatively independent strategies, which were tweaked during training and planning stage along with the other services, the same will not be feasible any longer. The Chiefs of the Army, Navy and Air Forces will be responsible for support actions and not operational planning and execution. This responsibility instead will rest with theatre commanders. However, even as these commanders execute their mandate with the requisite degree of autonomy, they will inevitably need the strategic guidance to implement their role. This guidance, as the organisational structure evolves, is bound to emerge from the office of the CDS in consultation with the Chiefs of Staff Committee on behalf of the Defence Minister. This guidance can take the form of the Defence Strategy or Defence Directive. However, unlike the present system, this document will need to be thought out, planned and executed in a top-down format, rather than merely compiling the inputs of the three services to create one.

It is understandable that such a document cannot and should not evolve in isolation, given the ever-widening scope of security, of which defence of the country in the traditional sense is but one aspect. Therefore, it becomes imperative to have a national security document or at least national security guidance for the defence strategy to emanate from. This should emerge from the National Security Secretariat, headed by the National Security Advisor (NSA). As a result, the NSA, who has a prominent role in the planning of national security of the country, becomes the coordinator for preparing such a document.

And finally, unlike the existing system, wherein the political leadership has a relatively limited role in the doctrinal evolution of India's security strategy and by co-relation the defence strategy, this reality will perforce undergo a change. The fact that the Defence

Minister will have a more direct role in the execution of national and defence strategies by the theatre commands, there will have to be a more personalised involvement of the individual concerned. This will not only emerge in terms of ratification of security challenges and identification of emerging threats, but also in allocation of resources and providing directions for prioritising procurements to meet such challenges. This will make the functioning of the Defence Minister more hands-on as compared with the present system and more involved in the day to day functioning of the armed forces. This gets further emphasised with the CDS presently not having a command function. In effect, the mandate for defence and security will emanate from the political authority far more obviously than has been the case in the past.

This brings up the final question in terms of the doctrinal evolution under emerging circumstances. Is this change for the better?

Yes, it is. Unlike the past when decentralisation had led to semiindependent doctrinal thought emerging from the three services without a centralised guidance providing an overarching theme, the restructuring will force the need for centralised guidance. This will make the operational philosophy more coherent and will better reflect the perspective of national security in its entirety. It will also better integrate other elements of national security, which largely remain peripheral for the armed forces, but are central to the idea of security for the national security planners. As an illustration, the national security establishment is bound to view terrorism and its supporting constituents emanating from Pakistan in a wider context which would include all aspects of hybrid warfare, as compared with the armed forces which will focus more on the military aspects of the challenge.

This shift also suggests that even as the restructuring of the armed forces and MoD takes place, the change cannot be limited to these establishments. It goes beyond the national security setup that exists and the one that should be put in place to better deal with the kind of challenges that are required to be dealt with in future to include information and cyber warfare. It also requires a simultaneous strengthening of the existing establishment to enable them to independently undertake assessment and analysis of national security in the backdrop of international events as they emerge. And if such expertise is limited within the government, the possibility to take the route of integrating experts outside it can be explored. Think Tanks remain largely outside the immediate policy formulation circles within the government in India. This is an opportune time to seek options for their contribution in this regard, given the confluence of international relations, defence and the wider aspect of security being areas of expertise of some institutions like the one the author is affiliated with.

### Conclusion

An American phrase is often quoted by those who are strong proponents of the importance of retaining what seems to work well. It goes, "If it ain't broke, don't fix it." This very phrase led to the naming of a previous book by this author called *Even If Ain't Broke*, *Yet Do Fix It: Enhancing Effectiveness Through Military Change*. This was not to say that the essence of the phrase is wrong. It was merely to reinforce that this oft quoted phrase cannot and should not become the basis for refusing changes, merely because a system seems to be functioning well even if its limitations and constraints are otherwise evident to those within the system and astute observers outside it.

The ongoing changes within the armed forces reinforce the arguments in that book. The change was long due. And as India's experience suggests, change has not always come as a result of defeat and failure. It has taken place as often if not more in the wake of successes like the one achieved during the 1971 Indo-Pak War and 1999 Kargil Conflict. This reality stems from the underlying drivers for change. While defeat can certainly serve as one, change can also come as a result of technological innovations, demands of modern warfare and the threat environment.

The need for integration between the armed forces and ensuring joint planning, training and execution of operations has for long been one such imperative that demanded substantial change. However, this had remained on the backburner for long on the premise that the services had found a way to somehow interact with each other and deliver when the time came and when the chips were down. However, as past experiences suggest, this delivery had remained suboptimal. The last major conflict in 1999 at Kargil reinforced this limitation visibly, even as an operational understanding was created after the initial hiccups. This was by no means a perfect solution. It

also indicated the challenges that existed within a system that was somehow managing to get the services to interact with each other.

While the limitations of the existing system became evident at times of conflict, it was possibly all the more obvious during "peace time" when operational commitments could not galvanise the establishments concerned into action. This is when the limitations of organisational constraints came to the fore – when differences in organisational culture became evident and when structural issues became impediments.

It was not merely armed forces' requirement for closer integration to take place, but a national imperative that it materialised. And change being as unwelcome as it usually is in any organisation, the resistance was understandable. It had long been recognised that this resistance could only be overcome by change being forced upon the armed forces from the very top. And this is exactly how the appointment of the Chief of Defence Staff (CDS) and the creation of the Department of Military Affairs (DMA) came about. And the formal mandate that has been assigned to the CDS and other stakeholders for further integration gives reason to remain optimistic about other changes that maybe in the pipeline, including theatre and functional commands.

Are there any potential challenges to the ongoing process of integration within the armed forces? Are there pitfalls that must be guarded against? The answer to both these questions is yes.

One of the biggest challenges to achieve any objective lies in the failure to think and visualise and the ability to achieve what might seem insurmountable to begin with. This reality often tends to differentiate those who aim for incremental advancement and others who demand and achieve revolutionary changes. Often the best time to attempt a revolutionary change is when a system demands a complete structural or for that matter a doctrinal rethink. A back to the drawing board situation. The armed forces are at this very juncture, given the opportunity to not only restructure but also to recast a single service-centric organisational culture. The political leaders have shown the way by going beyond expectations and commencing this process through solutions that were unexpected.

It is now up to the military hierarchy to follow-up on the same and challenge the status quo.

Change is difficult to achieve. However, when comparing implementation of structural change and change in operational or cultural dynamics, it is the former that is far easier to implement. And that is the process of change that is currently underway within the armed forces. Even prior to when these structural changes were ordered, there were a number of instances of integrated functioning that were in practice. One prime example of this endeavour was the creation of the Long-Term Integrated Perspective Plan for capability building through procurements for the armed forces. Instead of this process being truly integrated wherein a joint endeavour could be undertaken to envisage armed forces and national capabilities and thereafter translating this to a tri-service procurement plan, three wish lists received from the services were stapled together to create a joint plan. While this did undergo some improvement with the involvement of Headquarter Integrated Defence Staff, yet the process of integration largely remained a challenge.

The appointment of the CDS brings with it the authority to create a truly integrated platform for decision making. As part of the consultative process, even as the Chiefs of the three services have the liberty to meet the Defence Minister on issues related to their service, the CDS can offer his recommendations on specific issues, which includes the role of an arbitration authority. This could include major procurement decisions like additional fighter aircraft squadrons, aircraft carriers or the raising of a strike corps. His mandate and authority also allow him to set priorities for both capability development and pursuing the objectives of Aatmanirbhar Bharat or Self-Reliant India.

This very example highlights the potential challenges that could become an impediment for integration of the kind that is desirable rather than the one that had become the common lowest acceptable factor in the past. The tendency to slip back into the comfort zone of service-specific stove pipes remains real.

This reality stems from decades of cultural peculiarities that each service has developed, which provides an excellent common

code for functioning and operations within each service. However, this very service-specific code becomes an impediment for cross-cultural interaction between them. Commencing from a service-specific vocabulary to communication protocols and from following a completely different procedure for operational tasks to annual confidential assessment parameters – the gaps are wide and attitudes towards common issues at a distinct variance.

Over time, these gaps have led to the development of prejudices and opinions that may well have been the result of the experience of a few, yet these seem to have become the perspective of a service. Most of these exaggerated views have emerged from the limited interaction that takes place between officers of the three services. And as is often the case, these opinions tend to spread and get reinforced in the absence of regular communication.

Variations also come from services following different procedures for a similar operational situation. An example which is often quoted relates to conditions under which helicopter flying takes place. All three services follow their own assessment of when and how much risk is acceptable for support and rescue operations. Since these operations tend to have a cross-service application, the variation in expectations and responses tends to create dissatisfaction and often even anger.

A similar situation arises when logistic support arrangements are undertaken for more than one service in certain areas under the aegis of a single service. The differences in how each service is able to deliver quality tend to vary and this yet again becomes a point of comparison and dissatisfaction.

The aim of citing these examples was to reinforce the very fundamental differences that continue to remain and adversely impact the relations between the three services. And this only confirms that even as structural changes are underway, as these should be, these changes must simultaneously be accompanied by attempts at harmonising organisational culture and a joint-services ethos.

Technology has been seen as a great unifier and leveller. It has successfully brought people from diverse geographical and

cultural regions onto a single multi-cultural platform. However, as has been seen from the experience of social media platforms like Facebook, Instagram, Twitter and YouTube, people can successfully interact when the platform is common, open and with uniform functional norms that guide interaction. This experiential experiment can be interrupted when a country chooses to shield its people from some of these platforms. The example of China placing restrictions on its population in some instances is a case in point. This defeats the very purpose and essence of having seamless social interaction.

Now if the same example is taken for the services, then the existing and emerging challenges become obvious. These may not stem from the social media space, instead, it emerges from technology anchored platforms employed for both routine and operational functions of the services. The past decision of the three services to take an independent platform-specific approach to communication, weapon platforms and logistics networks creates the very anomaly that will have to be reinvented or at the very least re-engineered to ensure seamless connectivity.

In the past, the services developed their own intelligence and operational battlefield environment software. This has enabled them to improve surveillance and understanding of immediate areas of interest. However, the real test of improvements can only come from the ability to leverage this technological advancement in the pursuit of a collective intelligence and operational grid. Decision making by both uniformed and civilian leadership can only be informed when a holistic picture of events, even as these develop, is available on a real-time basis.

The example of the Kargil Conflict is an apt case study in this regard. In 1999, the army was severely hampered by inadequate intelligence. This led to costly time delays in a bid to understand the enormity of the challenge on the heights along the LoC. In addition, weak sharing mechanisms that could create a simultaneous intelligence picture amongst the armed forces and intelligence agencies further led to delays in decision making. Even as this weakness was rectified thereafter, the inability to collaborate

the advantage of technological inputs remained within the closed confines of individual services, to begin with.

Technology has come a long way since then. Battlefield transparency is beginning to come closer to the reality of a netenabled environment. India's adversaries are already in an advanced stage of operationalising informationalised battlefield conditions. These challenges and opportunities can only be met if the armed forces and the wider security community in India are able to share their resources in real-time.

This understanding does not merely stem from the experience of the armed forces in Kargil. It was also a major lesson learnt from the 26/11 terrorist strike engineered by Pakistan in Mumbai. The failure to collate and synthesise the intelligence picture despite inputs being received from different sources led to the attempt at creating an integrated intelligence ecosystem in the form of the National Intelligence Grid (NATGRID). This had been preceded by the Multi Agency Centre both at the central and state levels after the Kargil conflict. The objective of both remained better sharing and assessment of intelligence inputs received by multiple agencies in the country.

The changing character of war is no longer in question. It has been underlined and reinforced repeatedly within strategic circles and official documents. The Joint Doctrine and the Indian Army Doctrine quoted earlier in the book provide some details of this change having been recognised. However, it is perhaps more important to seek answers to the doctrinal and structural impact such changes could or should potentially have on the armed forces. This is where the ongoing structural changes become relevant. It is also for this reason that planners need to continue questioning themselves regarding the efficacy of the ongoing changes under these circumstances.

These changes must also reflect in the scope of responsibilities that the armed forces undertake and the priority that is given to allocation of resources for creation of capabilities.

This book has drawn some important conclusions that can assist in taking the ongoing restructuring further. It is important

to reinforce these here as relevant takeaways, even as these aspects form a part of a more detailed narrative earlier in specific chapters.

The government has taken perhaps the most difficult and farreaching step by creating the appointment of CDS and establishing the DMA. These initiatives create the core structural establishment for supporting the rest of the military integration that has been envisaged. This includes the theatre and functional commands.

Even as these processes remain underway, changes are likely to emerge in the role, responsibility and powers of each component which forms the part of the hierarchy. This could imply enhanced operational responsibility for the Permanent Chairman of the Chiefs of Staff Committee (COSC), given the need to coordinate and implement government directions within joint structures, something that has been ruled out presently.

There is clearly a need to create additional structures by sidestepping resources or strengthening existing ones. As an illustration, if the CDS has to function as the single point of advice for the government on joint military issues, which will include most matters in future, he cannot do so with the structural limitations of the Headquarter Integrated Defence Staff as it exists today. This could imply supplementing it with requisite staff to enable assessment of both operational and intelligence-related functions. Further, the CDS will also need advice of specialists from within the services to allow him to deliberate upon issues. This would yet again require an enlargement of his support structure.

The restructuring of the three-hatted structure of the CDS should not be seen in isolation. In essence, it will function to support and strengthen the decision-making ability of the Defence Minister and the national security establishment. This would imply that it is not only the CDS who is likely to find his role enhanced in future. It could also be the office of Defence Minister as well.

This integration of the DMA within the Defence Ministry will help fill the limitations that exist while creating defence policy and laying down priorities for not only capability building, but also while addressing threats and challenges. This closer involvement can be leveraged further through a coordinating mechanism on issues that have an inter-departmental agenda. This is where the Defence Minister's role as head of the team will come into play.

This linkage can best be created and successfully implemented through a clear and short chain of command emerging from the Cabinet Committee on Security (CCS), eventually to the theatre commanders at the operational end of the hierarchy. In real terms, this should flow from the CCS to the Defence Minister and further to the Chairman COSC and Theatre Commanders.

In such a case, the Defence Minister would not only benefit from inputs from the CDS and his support staff as also from the three services. He will also gain immensely from a vibrant, independent and qualified think tank community and academia. The recent past has witnessed a welcome move in this direction. There is greater participation from amongst this community and a willingness to share and comment on issues related to defence and security. This process can be enhanced by a concerted attempt through structured studies and closer integration of think tanks in long term decision making of the MoD.

There remains an ongoing debate regarding the number of geographical theatres and the status of theatre commanders. This project comes to the conclusion that theatre commanders should be in four-star appointments. It is also felt that creation of three theatres, including one against Pakistan, China and the maritime domain, is the best balance at present. In addition, functional commands for Air Defence, Training and Logistics would create the necessary support mechanism.

This issue is bound to be debated over time both in terms of the role of a theatre commander as well as the number of theatre commands. Analysis of this subject clearly indicates that this subject, like many others discussed in this book, must primarily be influenced by the operational and functional imperatives driving it. While human resource management is an important element of decision making, it cannot and should not become the overriding factor.

In view of the responsibility envisaged for theatre commanders, initially, the Service Chiefs will remain involved with operational

coordination as part of the COSC. However, as theatres mature with time, they will focus on raise, train and sustain functions. While this is likely to be seen as a witling down of the powers of the Chiefs as these exist today, however, in reality, it is a more focussed approach to both operational and support functions. Despite this change, the Chiefs will continue to provide the benefit of their experiences to the COSC and the Defence Minister.

The book discusses two commands in a degree of detail. These include the Air Defence Command, and the Logistics Command, which have been envisaged as functional commands. The considered conclusion reached as part of the study suggests that the Air Defence Command will bring additional advantages over a completely decentralised air defence system, as also in comparison with the existing structure in place. The envisaged change will enhance coordination, fill existing voids and ensure unity of effort. This is critical to ensure the implementation of a cohesive grid. However, in doing so, it would be useful to bring in necessary checks and balances to ensure that resources are not underutilised and are not considered as a permanent allocation to theatres.

The creation of the Logistics Command presents perhaps the most complex challenge for the armed forces. This stems from a well-established service-specific logistics supply chain and software platform that is already existing. This would not have been as big a constraint as it presents for future integration had there been a common platform and processes followed for automation. In the absence of the same, the future trajectory for integration will possibly need to first create a bridge between existing independent systems. This will have to be followed by integration of common products used by all services. And finally, a complete integration process will need a common platform and supply chain management system. This is likely to remain a time-consuming process and one which will possibly take the longest to implement. It will also emerge as a bottoms-up approach to restructuring.

In view of the complexity of the integration process involved, it is timely for the armed forces to not only create joint synergies, but also incorporate modern management techniques and technologies.

This includes the services of specialist consultants, who have global exposure and experience of similar kind. The recent automation of the online marketplace, GeM, for government procurement, is a case in point. The approach to logistics management is also likely to witness far greater outsourcing and privatisation than has been the practice in the past.

Three technologies that are revolutionising the industry at large and specifically supply chain management are Blockchain, Artificial Intelligence and Big Data Management. The opportunity presented by the ongoing restructuring and integration is ideal for bringing in the very best in cutting edge technology for inventory control and managing the logistics of the armed forces. It has the potential to shift at least partially to a push model instead of a pull model, which is largely in existence presently. The system will also enable predictive modelling based on an ongoing analysis of demands over time.

The changes in structures, doctrines and organisational cultural that will come about, must cater for organisations beyond the armed forces and what is traditionally seen as the defence establishment. Given the widening scope of national security, and even defence, it is equally relevant to bring greater cohesion with constituents which have always been a part of the war waging effort of the country, yet have remained on the periphery of its planning. This includes the Border Security Forces and intelligence agencies. The former especially, have and will take up defences shoulder to shoulder with the armed forces. It is imperative that a closer association is built with the force to enhance cohesion and efficiency.

### Annexures

#### **Annexure 1**

### MINISTRY OF DEFENCE (RAKSHA MANTRALAYA)

# A. DEPARTMENT OF DEFENCE (RAKSHA VIBHAG)

- 1. Defence of India and every part thereof including defence policy and 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.<sup>1</sup>
- 2. Omitted.<sup>2</sup>
- 3. Omitted.3
- 4. The Reserves of the Army, Navy and Air Force.
- 5. Omitted.4
- 6. The National Cadet Corps.
- 7. Omitted.5
- 8. Remounts, Veterinary and Farms Organisation.
- 9. Canteen Stores Department (India).
- 10. Civilian Services paid from Defence Estimates.
- 11. Hydrographic surveys and preparation of navigational charts.
- 12. Formation of Cantonments, delimitation/excision of Cantonment areas, local self-government in such areas, the constitution and powers within such areas of Cantonment Boards and authorities and the regulation of house accommodation (including the control of rents) in such areas.
- 13. Acquisition, requisitioning, custody and relinquishment of land and property for defence purposes. Eviction of unauthorised occupants from defence service land and property.
  - <sup>1</sup> Modified vide Amendment Series no. 353 dated 30.12.2019.
  - <sup>2</sup> Omitted vide Amendment Series no. 353 dated 30.12.2019.
  - <sup>3</sup> Omitted vide Amendment Series no. 353 dated 30.12.2019.
  - <sup>4</sup> Omitted vide Amendment Series no. 353 dated 30.12.2019.
  - <sup>5</sup> Omitted vide Amendment Series no. 353 dated 30.12.2019.

- 14. Omitted.6
- 15. Defence Accounts Department.
- 16. Purchase of foodstuffs for military requirements and their disposal excluding those entrusted to Department of Food and Public Distribution.
- 17. All matters relating to Coast Guard Organisation, including-
  - (a) surveillance of maritime zones against oil spills;
  - (b) combating oil spills in various maritime zones, except in the waters of ports and within 500 metres of off-shore exploration and production platforms, coastal refineries and associated facilities such as Single Buoy Mooring (SBM), Crude Oil Terminal (COT) and pipelines;
  - (c) Central Coordinating Agency for Combating of Oil Pollution in the coastal and marine environment of various maritime zones;
  - (d) implementation of National Contingency Plan for oil spill disaster;
     and
  - (e) undertaking oil spill prevention and control, inspection of ships and offshore platforms in the country, except within the limits of ports as empowered by the Merchant Shipping Act, 1958 (44 of 1958).
- 18. Matters relating to diving and related activities in the country.
- 19. Capital Acquisitions exclusive to the Defence Services.<sup>7</sup>
- 20. All matters relating to Border Roads Development Board and Border Roads Organisation.<sup>8</sup>
- 21. Institute for Defence Studies and Analysis, National Defence College and any other organisation within the Ministry of Defence whose remit is broader than military matters.<sup>9</sup>

Source: Cabinet Secretariat, Government of India, Allocation of Business Rules, Second Schedule, at https://cabsec.gov.in/businessrules/allocationofbusinessrules/secondschedule/, accessed on 15 April 2020, pp. 45-46.

<sup>&</sup>lt;sup>6</sup> Omitted vide Amendment Series no. 276 dated 22.09.2004. 45

<sup>&</sup>lt;sup>7</sup> Modified vide Amendment Series no. 353 dated 30.12.2019.

<sup>8</sup> Inserted vide Amendment Series no. 311 dated 09.01.2015.

<sup>&</sup>lt;sup>9</sup> Inserted vide Amendment Series no. 353 dated 30.12.2019.

# AA. DEPARTMENT OF MILITARY AFFAIRS<sup>1</sup> (SAINYA KARYA VIBHAG)

- 1. The Armed Forces of the Union, namely, Army, Navy and Air Force.
- 2. Integrated Headquarters of the Ministry of Defence comprising of Army Headquarters, Naval Headquarters, Air Headquarters and Defence Staff Headquarters.
- 3. The Territorial Army.
- 4. Works relating to Army, Navy and Air Force.
- 5. Procurement exclusive to the Services except capital acquisitions, as per prevalent rules and procedures.
- 6. Promoting jointness in procurement, training and staffing for the Services through joint planning and integration of their requirements.
- 7. Facilitation of restructuring of Military Commands for optimal utilisation of resources by bringing about jointness in operations, including through establishment of joint/theatre commands.
- 8. Promoting the use of indigenous equipment by the Services.

 $<sup>^{\</sup>rm 1}$  Inserted (along with entries 1 to 8) vide Amendment Series no. 353 dated 30.12.2019

#### Endnotes

- 1. For evaluation of military change in India see Vivek Chadha, Even if Ain't Broke Yet Do Fix It: Enhancing Effectiveness Through Military Change, Pentagon Press, New Delhi, 2016.
- 2. Ibid., pp. 73-75.
- 3. Air Cmde Jasjit Singh, India's Defence Spending: Assessing Future Needs, KW Publishers, New Delhi, 2000, p. 23.
- 4. See Annual Report 1964-65, Ministry of Defence, Government of India, p. 17; K. Subrahmanyam, "The Ghosts of 1962", in K. Subrahmanyam and Arthur Monteiro (eds), *Shedding Shibboleths: India's Evolving Strategic Outlook*, Wordsmiths, New Delhi, 2005, p. 323.
- 5. Gen. K. V. Krishna Rao, *Prepare or Perish: A Study of National Security*, Lancer Publishers, New Delhi, 1991, pp. 478-479.
- 6. Vivek Chadha, Note 1., pp. 38-40.
- 7. "Report of Group of Ministers on National Security", 2001 at https://www.vifindia.org/sites/default/files/GoM%20Report%20on%20 National%20Security.pdf, accessed on 18 March 2020, pp. 100-101.
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#### CDS AND BEYOND

#### Integration of the Indian Armed Forces

Defence reforms are a challenge for most countries. The lessons from India's experience suggest that major change has almost always been mandated from the very top. The ongoing structural changes are also being driven by the highest political office in a bid to seek integration, indigenisation and greater effectiveness of the armed forces.

The ongoing military reforms began with the appointment of the Chief of Defence Staff (CDS) and creation of the Department of Military Affairs. Future changes are likely to include the creation of theatre commands, functional commands, restructuring of Army Headquarters and a number of other associated shifts in conjunction with these big bang reforms.

It would not be an exaggeration to say that these changes are perhaps the most farreaching military reforms in India's post-independence history.

The book undertakes a focussed assessment of the changes that commenced with the appointment of CDS. This includes the role and inter-se co-relation between major stake holders and defence departments. Keeping in view the need to enhance operational effectiveness, recommendations regarding the chain of command, rank structures and role of service chiefs have been made. The book will also analyse the structure and role of the future Air Defence and Logistics Command.

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