# TRAINING FOR MULTI-DOMAIN WARFARE: THE INDIAN IMPERATIVE

**Warfare has irreversibly shifted to multi-domain operations, with non-kinetic vectors increasingly shaping and complementing kinetic action. This evolution demands a fundamental transformation in military training. For the Indian Armed Forces, training needs to move beyond domain-centric models and align directly with operational realities, preparing commanders and soldiers comprehensively for all foreseeable facets of modern conflict**

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Military preparedness pivots on the quality of training that precedes combat. While weapons, platforms and doctrines continue to evolve, it is training that ultimately shapes how soldiers and commanders respond under pressure. As the character of warfare changes, it becomes imperative to transform the manner in which Armed Forces prepare for conflict. Traditionally, Armies tend to train for the previous war; this approach now demands a fundamental shift.

Contemporary conflict bears little resemblance to the linear battlefields of earlier eras. Operations today unfold across multiple, overlapping domains, including land, air, maritime, cyber, electromagnetic, space and the information environment. This often happens concurrently and with minimal warning. Non-kinetic vectors increasingly complement and in many cases, precede kinetic actions, shaping the battlespace even before the first shot is fired. This convergence has compressed decision cycles, heightened battlefield transparency and significantly narrowed the margin for error.

For India, characterised by its huge size and diverse terrain, a complex security environment and a wide spectrum of threats, the challenge is unambiguous: training must prepare forces for contested, multi-domain battlefields rather than conventional, idealised or compartmentalised scenarios.

## THE CHANGING CHARACTER OF THE BATTLEFIELD

**Persistent Surveillance and Compressed Decision-Making.** The modern battlefield is defined by near-constant observation and unprecedented transparency. Unmanned aerial systems, satellites, ground sensors and open-source intelligence have significantly eroded the ability to conceal intent, movement and force build up. Areas once considered relatively secure including command posts, logistics nodes and rear echelons are now the prime targets for detection and precision targeting. This persistent visibility compresses decision timelines and imposes a heightened cognitive load on commanders at all levels. Training must therefore condition leaders and soldiers to operate under continuous observation, ambiguity and pressure.

**Manned–Unmanned Integration and Precision Warfare.** Unmanned systems have transitioned from supporting roles to becoming central actors in military operations. Their employment reduces physical risk to personnel and, by extension, lowers the political threshold for their use, altering escalation dynamics and expanding the scope for calibrated force application. Drones, loitering munitions and autonomous surveillance platforms increasingly shape the battlespace well before traditional force-on-force contact. When integrated with precision-guided munitions and reliable intelligence, they enable rapid, high-impact actions with effects that can extend well beyond the tactical level. This evolution places a premium on tempo, coordination and sound judgement. These qualities need to be deliberately cultivated through training.

**Convergence of Kinetic and Non-Kinetic Effects.** Modern conflict is characterised by the seamless integration of kinetic force with cyber operations, electronic warfare, space-based effects and information campaigns. More often than not, communications are disrupted, sensors degraded and narratives contested even as manoeuvre forces advance, significantly amplifying the ambiguity on the battlefield and within command posts. Training that isolates these effects or treats them as episodic disruptions risks preparing forces for an incomplete and sanitised version of war. Forces must be trained to fight through them rather than around them.

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## LIMITATIONS OF CONVENTIONAL TRAINING APPROACHES

**Predictability and Control.** Conventional training methodologies remain indispensable for building discipline, procedural competence and unit cohesion. However, they often operate within predictable and tightly controlled frameworks. Enemy actions are known, escalation is managed and outcomes are broadly anticipated.

Multi-domain warfare, by contrast, is marked by uncertainty, surprise and rapid adversary adaptation. Friction, ambiguity and imperfect information are defining features of modern conflict. Training that insulates commanders from these realities risks producing competence in routine conditions, but fragility under pressure. Effective preparation must therefore expose leaders to uncertainty rather than shield them from it.

**Siloed Training Structures.** A significant limitation of existing training paradigms lies in their fragmentation across multiple dimensions.

a. First, individual and collective training are often conducted in parallel rather than as a continuum. Skills acquired at the individual level are seldom integrated seamlessly into collective training, resulting in gaps when units operate under realistic conditions.
b. Second, there remains a persistent disconnect between live (field firing &

exercises), virtual (simulated training) and constructive training (wargaming). The absence of integration between these modes limits the ability to translate conceptual understanding into tactical and operational execution.

c. Third, training lacks adequate progression across regimental centres, field units, Category 'A' establishments and other training nodes. This discontinuity inhibits cumulative skill development and weakens institutional learning.

Training excellence within individual arms and services does not automatically translate into effectiveness across domains. Platform-centric and arm-specific training, when pursued in isolation, restrict exposure to the complexity of joint and combined operations. In multi-domain conflict, actions in one domain inevitably influence outcomes in others. Training architectures must therefore reflect this interdependence rather than reinforce silos.

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**Under-representation of Non-Kinetic Stressors.** Non-kinetic elements, including electronic warfare, cyber disruption and information operations are frequently introduced as discrete training events rather than as persistent operational conditions. As a result, commanders may understand these threats conceptually, yet remain insufficiently conditioned to operate amid sustained degradation, uncertainty and cognitive overload. Modern battlefields demand the ability to fight through disruption rather than wait for restoration. Training that does not replicate this reality risks leaving forces operationally unprepared despite technical awareness.

## BRINGING REALISM BACK INTO TRAINING

**Red Teaming as a Way of Thinking.** Red Teaming must move beyond being

a periodic exercise to becoming an embedded training philosophy. A credible Red Team challenges assumptions, adapts dynamically and exploits vulnerabilities across domains. In the Indian context, Red Teams must be grounded in real adversary doctrines, capabilities, and behavioural patterns, compelling commanders to think like their opponents and adapt under pressure. AI powered Red Teams can inject realism beyond conventional means.

**The Live-Virtual-Constructive Continuum.** No single training medium can adequately replicate the demands of modern warfare. Realism emerges from the intelligent integration of live, virtual and constructive training, each reinforcing the other.

- Live training builds physical robustness, confidence, and trust
- Virtual training enables immersion, repetition, and experimentation without risk
- Constructive simulation allows leaders to grapple with scale, tempo, and complexity

When integrated, these elements create a training environment that mirrors the cognitive and operational challenges of combat.

**Creating a Training-Operations Continuum.** Training environments must increasingly reflect operational realities including terrain, threat behaviour, electromagnetic conditions and decision pressures. The closer training resembles combat, the smaller the cognitive transition required when forces deploy.

## REIMAGINING TRAINING ARCHITECTURE IN THE INDIAN CONTEXT

**Integrated Architecture from Institutions to Networked Ecosystems.** Future training systems must evolve from a collection of isolated institutions into networked training ecosystems. Units, formations & training establishments need to be connected through secure and resilient digital infrastructure, enabling collective training despite geographical dispersion. An integrated architecture would allow training to move beyond episodic events toward continuous, progressive preparation. It facilitates distributed collective training, enables rapid dissemination of lessons from operations and exercises and ensures that learning is retained institutionally rather than remaining localised. For a force operating across diverse terrains and threat environments, this adaptability is essential.

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**Jointness through Experience.** Jointness cannot be achieved through policy directives or doctrinal articulation alone. It must be experienced and internalised through training, where personnel from different services operate within shared scenarios, confront common challenges and develop mutual understanding. Integrated simulation-based training environments, particularly those that support collective, multi-echelon participation and offer a practical means to achieve this. By enabling forces to plan, execute and assess operations together, such environments help build familiarity, trust and operational coherence long before forces deploy in real-world situations.

## TECHNOLOGY AS AN ENABLER OF WARFIGHTING EFFECTIVENESS

Technology should not be viewed merely as a training aid. When applied judiciously, it becomes a transformative enabler of better judgement, sharper decision-making and deeper professional understanding. Advanced simulations and objective analytics shift training emphasis from task completion to decision-making under stress, allowing leaders to examine not just outcomes, but the reasoning that produced them. Used wisely, training technology can significantly strengthen the organisational capabilities.

## SUMMING UP

Multi-domain warfare has emerged as a defining feature of the contemporary security environment. For India, preparing for this reality requires a fundamental shift in how training is conceived, structured and delivered. By embedding realism through institutionalised Red Teaming: integrating live, virtual and constructive training; strengthening the training–operations continuum and reimagining the training architecture, the Indian Armed Forces can ensure that preparation keeps pace with the evolving character of war. Such an approach aligns training more closely with operational demands and reduces the gap between rehearsal and execution.

Ultimately, effective training is measured not by activity or intensity alone, but by its ability to prepare forces for the conditions under which they will be required to fight. In war, outcomes are decisive and preparation must reflect that reality.

*–The writer is a military veteran and capability architect. His work focuses on solving defence challenges at the intersection of technology, policy, strategy and execution. The views expressed are personal and do not necessarily reflect the views of Raksha Anirveda.*