

INTEGRATED DETERRENCE: RELEVANCE & IMPLICATIONS FOR SOUTH ASIA

*Adil Sultan, Faraz Haider and Shayan Hassan Jamy**

Abstract

The US National Security Strategy of 2022 introduced a relatively new concept of Integrated Deterrence (ID) that will likely impact security discourse amongst global rivals such as the US, China, and Russia while affecting the strategic thinking of relatively smaller powers like India, Pakistan, and others. With an expanded scope and objectives, ID aims to build and integrate the entire spectrum of capabilities of the US, its allies, and partners against the perceived threat from China and possibly Russia. Resultantly, the paper focuses on implications of ID for security and strategic stability in South Asia. India, being a major strategic partner with the will to play a significant role in the US-led China containment strategy, is likely to be a major beneficiary of the new US posture of ID. With enhanced and integrated military capabilities, India is likely to adopt a more hostile posture towards its neighbours, especially Pakistan, thus forcing the latter to develop options in the form of 'Integrated Response', to help maintain strategic stability in the region without indulging in an arms race, and by maintaining neutrality in the evolving US-China great power competition.

Keywords: Integrated Deterrence, Full Spectrum Deterrence, Integrated Response, Emerging Technologies, South Asia, Strategic Stability.

Introduction

Deterrence as a concept predates the Cold War and covers the logic that actor A will not take an unfavourable action (as perceived by the recipient) against actor B because actor B can and might retaliate to inflict an unacceptable cost to actor A. More simply, the cost will outweigh the benefit for actor A, and thus, it is likely to be deterred. Deterrence, whether conventional or nuclear, fundamentally differs from traditional military or war strategies because its aim as a strategy is to prevent and avoid a conflict.¹ Its inclusion as part of strategic thought, planning, and policy became a dominating factor after WWII when nuclear weapons were introduced.² Deterrence as a strategy in its purest forms indicates that the state adopting it does not intend to take part in an armed conflict to protect its vital interests unless it is the option of a last resort. Therefore, deterrence possesses a defensive intent and seeks to prevent aggression without being aggressive itself.³ Nevertheless, other forms of deterrence or, more aptly, the concept of coercion that nuclear weapon states indulge to compel their

¹Dr. Adil Sultan is Dean and Head of Department at Faculty of Aerospace & Strategic Studies, Air University, Islamabad. Faraz Haider is a Lecturer at the Faculty of Aerospace & Strategic Studies, Air University, Islamabad. Shayan Hassan Jamy is a former Research Assistant at the Faculty of Aerospace and Strategic Studies, Air University, Islamabad. The author(s) can be reached at fa.haid@hotmail.com.

adversaries to act in a way that is considered favourable to the coercing state's interests.

Over the past several decades, deterrence has evolved with the inclusion of new technologies and warfighting concepts, thus expanding the scope and objectives that a deterrer might be pursuing from the deterree and the means with which those may be pursued. Arguably, the most recent iteration of deterrence thinking and terminology is Integrated Deterrence (ID), which has been posited by the US. As previous trends may indicate, concepts stemming from the US strategic thought have the potential to grow and adopt global relevance. Moreso, much of the strategic debate in South Asia uses Cold War concepts or those that have been part of the US strategic discourse. Therefore, ID will likely hold relevance for South Asia as a concept in strategic discourse and through any impacts it may have on regional security and deterrence dynamics.

Various questions arise from ID's relevance to South Asia. How will it materialize in the future for South Asia and implicate the region when a state like India adopts a similar approach or at least engages with the US as part of ID for its national interest? Given that South Asia includes two nuclear-armed countries with an adversarial history, the paper seeks to discuss and explore ID in the context of its relevance for South Asia. Additionally, the paper focuses on what sort of security and strategic implications may arise and how they will affect the regional deterrence dynamics of South Asia. It aims first to analyse the concept itself in order to assess the elements that may interact with South Asian strategic dynamics the most and, based on that assessment, discuss the likely security and strategy implications. While ID is a broad concept, given the region's deterrence dynamics and existing trends, the paper will focus on its political and technological aspects to understand its implications for the region while highlighting the related challenges that Pakistan may have to overcome if it considers developing an 'Integrated Response'.

The Concept of Integrated Deterrence

ID, as a specific approach, is a relatively new concept. However, it has not come from a void. Instead, it is a continuation of existing deterrence thinking but with a concerted effort to position it as the next big deterrence strategy that transcends the traditional nuclear-centric approach. The US National Security Strategy (NSS) 2022 shows how ID originates from existing strategic thought.⁴ From the NSS 2022, it can be seen that ID possesses similar ends as were stated by President John F. Kennedy in the Flexible Response (FR) strategy. President Kennedy stated the ends of the FR strategy were to deter wars across the spectrum from general to limited and from nuclear to conventional, whether small or large.⁵ Similarly, ID, as described in the NSS 2022, seeks to deter conflict across the armed conflict spectrum in addition to conflict below the spectrum. Along with the similarities, there is a core difference in their philosophy. FR presents a nuclear warfighting philosophy whereas ID seeks to use all tools at the state's disposal in multiple domains to deter the perceived threats.

The presence of similarities between deterrence thinking before and what ID posits, does not take away its importance. Instead, it necessitates debate because said concept will permeate and guide US actions and become a banner concept to justify policies globally, including those affecting South Asia. Moreover, it has been formulated as a cornerstone of all major US policy and strategy documents, including the National Security Strategy,⁶ National Defense Strategy, Missile Defense Review, and Nuclear Posture Review.⁷ This observation that has been present in the US strategic thought is likely to continue as the adversaries named in the documents mentioned above indicate a significant great power competition, which elucidates the chances of ID gaining further traction as the competition intensifies.

To observe that impact factor or relevance on a regional level in South Asia, the concept of ID itself requires discussion. The US Secretary of Defense, Lloyd Austin, introduced the term in 2021 and elaborated how the US will view deterrence moving forward.⁸ While retaining the supremacy of deterrence in its defense strategy, he expanded on what it will consider to be a tool of deterrence in a formal manner through the introduction of this concept by stating that existing capabilities will be employed. New ones will be built and then used all together in networked ways while working in coordination with US allies.⁹ On another occasion, he said that ID is the use of all capabilities in the various domains of warfighting, such as air, land, sea, space, and cyber.¹⁰

The US National Security Strategy (NSS) 2022 reiterates the concept outlined in the above-quoted statements and elaborates that the nuclear deterrent will be the primary tool of deterrence.¹¹ However, it goes on to expand that it will be augmented significantly through emerging technologies (predominantly those in the space, cyber and AI domains) on their own and their integration with other deterrence tools. Furthermore, deterrence as a whole will be strengthened through integrating US capabilities with their allies via investments that further interoperability and develop capabilities jointly alongside planning postures.¹² The integration of said emerging technology domains and allies as an active tool of deterrence forms a substantive portion of ID and those with arguably the most relevance to South Asia as well. This becomes more evident as the concept of ID is elaborated in the National Defense Strategy (NDS).

The NDS identifies China as its prominent competitor and puts forward the use of 'Deterrence by Direct and Collective Cost Imposition' where 'aggression will be met with a collective response,' and said the response will involve collaborative efforts with US allies and partners which forms the 'integration with allies and partners' aspect of ID.¹³ Considering the above highlighted elements of this concept, its relevance for South Asia can be observed when Indo-US defense and strategic partnership is an important tool in deterring China as part of the ID posture.¹⁴ Given that this concept and its employment by the US brings South Asia into the mix, its impact must be analysed and discussed to understand the possible similarities with

Pakistan's Full Spectrum Deterrence (FSD) posture and the gaps that may need to be plugged to maintain strategic stability in South Asia.

South Asian Dynamics of Deterrence

While Pakistan and India became overt nuclear states in 1998, deterrence was at play well before.¹⁵ It was first introduced during the Exercise Brasstacks crisis in 1986 when India conducted a major force mobilization near the international border with Pakistan under the guise of a military exercise and Pakistan responded by signalling the possibility that nuclear weapons could be used. This signalling effectively prevented an all-out conflict between the two nuclear adversaries. Subsequently, other crises since overt nuclearization have not escalated to an all-out conflict because the adversaries in question possess nuclear weapons, as was evident during the Kargil Conflict, Twin Peaks Crisis, Mumbai Crisis, and Balakot Crisis.¹⁶ For Pakistan, the existential threat from India drove the initiation and maturation of the nuclear program. Whereas India's model is most closely connected to technological ambitions and prestige.¹⁷ This model feeds into India's strategic and conventional force modernizations, technological improvements, and strategic partnerships. Resultantly, the South Asian deterrence equation and dynamics are impacted.

The Evolution of Full Spectrum Deterrence: FSD was first introduced in a press release issued by Pakistan's National Command Authority in 2013. It stated that Pakistan will not and essentially cannot remain ignorant to any change in the security dynamics in the South Asian region and, thus, has to sustain a capability of full spectrum deterrence that can deter the various forms of aggression. However, senior decision makers later elaborated on what the spectrum meant, including Lt Gen (Retd) Khalid Kidwai (former Director General of Strategic Plans Division). In 2015, the rationale provided for FSD was that since India was looking to engage in armed conflict under the nuclear umbrella as part of its Cold Start Doctrine (CSD), therefore, Pakistan was compelled to factor all threats across the whole spectrum by developing a "variety of nuclear weapons, in different categories" to deal with threats at the strategic, operational, and the tactical levels,¹⁸ against countervalue and counterforce as well as battlefield targets.¹⁹

It is important to note that the declaration of FSD and how it works, as mentioned above, were directly linked with the developments in India. At another speech in 2020, Lt Gen. (Retd) Khalid Kidwai further expanded the term by stating that FSD has two components, a vertical and horizontal axis of sorts, where vertical consists of having strategic, operational, and tactical systems, and horizontal balancing comprises weapon systems in the land, air, and sea domains.²⁰ Resultantly, a transition or expansion in FSD's focal point can be observed from deterring the full spectrum of threats to the full spectrum of capabilities to deter the varied sorts of aggression.

In the same keynote address, Lt Gen. (Retd) Khalid Kidwai also stated that FSD defines the weapons categories,²¹ which lends weight to the likelihood of a

transition or expansion in FSD towards a spectrum of capabilities. This raises an interesting notion that FSD may be subject to reevaluation in terms of what comprises the 'full spectrum' regarding both what is to be deterred and with what tools. Said reevaluation is more likely if India's role in US' ID strategy impacts the spectrum of threats that the FSD is employed for, as well as the spectrum of capabilities required to deter.

Expanding further on the earlier evaluation of the FSD, Lt Gen. (Retd) Khalid Kidwai, in his speech on Pakistan's 25th anniversary of nuclear tests stated that FSD consists of a nuclear triad along with a variety of nuclear weapons in which the vertical spectrum is composed of "adequate range coverage from 0 meters to 2750 kms, as well as nuclear weapons destructive yields at three tiers: strategic, operational and tactical".²² According to him, such a capability will provide Pakistan with the option of a "counter-massive retaliation".²³

The lowering of missile ranges attracted considerable negative focus and could have triggered an unnecessary debate given the perceptions associated with zero-metre nuclear weapons.²⁴ This aspect was later clarified through media where he was quoted to have said that the term "zero-meter range" was used only metaphorically.²⁵

Considering how the FSD has evolved, it is crucial to analyse how the two concepts of FSD and ID will interact and what implications may stem from that interaction. Additionally, it is important to consider whether both have similarities or differences that will determine the impact that could provide a grounding for future research.

ID and FSD: A Comparison: The form in which ID has been presented by the Biden administration has some specific similarities with FSD and differences, keeping in mind South Asia's deterrence dynamics discussed earlier. It can be observed that FSD's horizontal spectrum of deterrence domains is similar to the air, land, and sea domains that ID talks about when it states the integration of these traditional military domains with new ones.²⁶ Additionally, the vertical weapon system capability of strategic, operational, and tactical systems to deter the spectrum of threats on those levels in FSD resemble ID's spectrum of conflict to an extent. So, ID and FSD are similar in the sense that each seeks to deter across all spectrums of conflict and domains of deterrence. However, they differ in who is deterred and what tools are used for deterrence.

In the India-Pakistan scenario, FSD is geared towards deterring India, which determines what kind of aggression needs to be deterred given India's capabilities and actions. Furthermore, what can be used as a tool of deterrence is determined by Pakistan's capabilities. This creates the difference between FSD and ID, where the latter adds military domains of emerging technologies such as cyber and space-based technologies as part of its 'integration across domains' and non-military domains for deterrence.²⁷

The other major difference is the use of integration of allies for the purpose of deterrence and associated investments for interoperability, joint capability development, and cooperative posture planning.²⁸ Moreso, the major differences between FSD and ID shed light on how the latter will interact with the former. The capability development of allies and partners may directly create implications for Pakistan's FSD in relation to India's capability development as part of ID, whether in the existing horizontal domains of FSD or new ones based on emerging technologies. The potential for this interaction and subsequent implications become evident when the Indo-US strategic partnership and its development over the years is analysed.

ID in South Asia: A Network of Allies and Strategic Partnerships

The developments which have challenged deterrence previously in the region have emanated from India with responses to reinstate deterrence and reestablish strategic stability emerging from Pakistan.²⁹ Some of those actions by India include the deployment of a sea-based second strike and the intention of limited war via the CSD,³⁰ Ballistic Missile Defense (BMD) systems,³¹ and Anti-Satellite Weapon Systems (ASATs).³² It is noteworthy that said capability development in strategic domains has impacted deterrence in South Asia, and that the differences highlighted earlier between FSD and ID in relation to deterrence in the region may pose further challenges over time. Additionally, technologically advanced capability development of India as part of ID will not be a new initiative but furthering a trend that started with the Indo-US strategic partnership.

The introduction of new technologies could add further stress on Pakistan's FSD. The spectrum of threats that FSD seeks to deter can become strengthened to the point that the current systems may not be able to create the deterrent effect, such as through capability enhancement and later integration of emerging technology domains in India's conventional and strategic systems. Also, space and cyber as military domains of deterrence in which India may possess an increasing capability as a result of ID being employed in the region could leave FSD ill-equipped to deter these additional domains. Alternatively, it may increase the reliance on the FSD's existing horizontal weapons systems in the air, land, and sea domains, which can be problematic as it can raise questions on how credible that deterrence would be. To understand how or why that could be the case, the emerging technologies in question need to be analysed along with how they interact with and impact deterrence.

Emerging Technologies and Integrated Deterrence in South Asia

Out of the several military technologies and domains mentioned in the concept of ID, the ones that hold the most relevance for South Asia and the ones which could have the largest impact on deterrence are Artificial Intelligence (AI), cyberspace, space, and hypersonic missiles.

The Role of AI in India's Military Potential: India has given great importance to the indigenous development and military incorporation of AI. India's Land Warfare Doctrine (LWD) of 2018 states that "at the core of our future military planning will be the effective integration of humans, AI and robotics into warfighting systems".³³ Likewise, the objectives of the Indian Ministry of Defence (MOD) AI Task Force included "establishing a tactical deterrent in the region and making recommendations of making India a significant power of AI in defence specifically in the area of aviation, naval, land systems, cyber, nuclear, and biological warfare".³⁴ India has made significant progress to convert this goal into a reality.

At India's first AI-in-defence symposium in July 2022, 75 newly developed AI projects were launched, with over 100 projects currently under development.³⁵ These included projects for autonomous systems, command, control, communication, intelligence, surveillance and reconnaissance (C4ISR), cybersecurity, LAWS and more. During the symposium, India's Defence Minister Rajnath Singh stated, "we have started incorporation of AI applications in remote piloted, unmanned aerial vehicles etc. There is a need to move further in this direction so that we can develop autonomous weapon systems".³⁶

There have been reports that India has already inducted AI-enabled drone swarm systems into its mechanized forces.³⁷ Such drones and AI-enabled surveillance systems have also reportedly been deployed at India's Western border with Pakistan, as well as its Northern border with China.³⁸ While the purpose of these drones is only for ISR, it has already set a precedent for using AI in South Asia.

India and the US have agreed to launch a Defence Artificial Intelligence Dialogue in 2022. Both states have also signed a project agreement regarding air-launched Unmanned Aerial Vehicle (UAV).³⁹ India has signed similar agreements with Israel, QUAD,⁴⁰ and others. India's domestic AI progress, combined with increasing AI cooperation with other states, all points toward a gradual increase in their military use of AI. Deploying AI-enabled drone swarms, LAWS and decision-making systems could fundamentally alter the South Asian deterrence equation.

The potential use of these AI systems in a conflict between India and Pakistan needs to be assessed. What if India decided to use AI-enabled drone swarms to target Pakistan instead of its recent use of surgical strikes? Although some of these drones could be for communication and ISR purposes, others could be armed. Also, India's use of AI-enabled decision-making systems would give it a tremendous edge in any conflict with Pakistan. We also need to consider the integration of AI in India's NC2 (Nuclear Command and Control). Although such a development would be alarming, the possibility cannot be ruled out.

India's Cyberspace Capabilities: A report by the International Institute of Strategic Studies (IISS) ranked India as a Tier-3 cyber state, stating it has "relatively poor cyber-security" and that its cyber capabilities are "Pakistan-focused".⁴¹ Despite its lack of progress, India has given importance to the military use of cyberspace. India's

LWD states that “the Indian Army will upgrade existing Cyber Warfare capabilities with the objective to develop cyber deterrence and defence capabilities”.⁴² To meet this end, India created its Defence Cyber Agency (DCA) in 2019. It has also significantly increased cooperation in cyberspace with the US, Israel, QUAD, and others. The US-India Cyber Dialogue was initiated in 2020, with both states agreeing to expand joint cyber training and exercises in 2022.

Currently, India has mostly used cyberspace to target Pakistan through information warfare and by cyber-attacks on government and military websites and officials.⁴³ Such cyber-attacks, although minor, could break the trust of the population in the state institutions if allowed to persist and resultantly compromise national security as well. Additionally, it creates a perception of minimal consequence, meaning that India can continue such actions, which in turn emboldens its posture in the region and disrupts strategic stability as a result. What if several coordinated cyber-attacks disrupted the working of government websites during a conflict between India and Pakistan? Simultaneously, the online Indian 'cyber army' would be at work trying to shift the global narrative of the incident towards India.

Other major cases of cyber warfare have yet to be seen in South Asia, although we have seen them play out in other parts of the world. An Indian cyber-attack on Pakistan's civilian infrastructure, including communication, water, electricity, or other industries could have significant consequences. Similarly, cyber-attacks on critical infrastructure, such as military and nuclear facilities, should be viewed as acts of warfare. The real risk is the possibility of a coordinated cyber-attack during a conflict. Should India use cyberspace to disrupt Pakistan's military communication, C₂ (command and control), or even directly target military and nuclear facilities, what would the appropriate response be?

India has also given great importance to its space assets by developing space-based capabilities. The 2017 Joint Doctrine of the Indian Armed Forces states that measures to exploit space for military applications are already being undertaken to leverage its space power for the purpose of protecting its national space-related assets and to further defence abilities across the spectrum of conflict.⁴⁴ Also, India's LWD states that its western border operations will centre around force and space.⁴⁵ Regarding how their space assets would be used, the LWD highlights that constant surveillance of borders through satellites will be employed to better inform operational planning with precise and accurate inputs to mitigate threats and integrate its space-based assets with its weapon systems on the ground.⁴⁶ Clearly, a major reason for India's militarization of space is to exploit weaknesses against Pakistan.

India has made significant progress with its space program in recent decades. India has several indigenously developed satellites that are currently operational for civilian, military, or dual-use purposes. Overall, India has 53 operational satellites, of which 21 are for communication, 8 for navigation, 21 for Earth observations, and 3 for science-related observation and data collection.⁴⁷ India also boasts a regional

navigation satellite system (NavIC) that gives accurate and real-time services for timing and positioning.⁴⁸

India's BMD system is also reliant on its space capabilities, as it cannot operate effectively without remote-sensing satellites.⁴⁹ A high-functioning BMD system provides India with a more survivable arsenal, significantly improving its second-strike capability.⁵⁰ India has also successfully tested its anti-satellite (ASAT) capability in 2019, allowing it to target other states' space assets directly.⁵¹

Through its space cooperation with states like the US, Israel and others, India has access to military-grade imagery. The US and India have also recently signed a Space Situational Awareness Agreement,⁵² and have announced plans for greater space cooperation in the future.

India possesses superior space-based ISR, communication, and navigation capabilities than Pakistan, which already gives it a tremendous edge in a conflict. India's planning before and during such a conflict would be drastically improved due to its space assets. Particularly important is the fact that the majority of India's space program is indigenous, so it would not be reliant on any other state during a conflict.

India could also directly use its demonstrated ASAT capability against Pakistani satellites. Despite Pakistan only having limited space assets, they are still important for navigation and ISR purposes. Also, Pakistan and China have already signed agreements to increase Pakistan's space presence. If Pakistan were to increase its space assets, they would certainly be vulnerable to an Indian ASAT attack or other non-kinetic attacks. This could cause disruptions to the Pakistani military's communication, navigation and C2.

India's Hypersonic Capabilities: India has also made significant progress with its hypersonic programme. It tested its indigenous Hypersonic Technology Demonstrator Vehicle (HSTDV) in 2020 and 2022,⁵³ and is expected to fully develop hypersonic missiles in 5-6 years. This would make India only the fourth state to possess hypersonic capability. India is also developing Brahmos-II, a hypersonic cruise missile.⁵⁴

The presence of hypersonic missiles in India's arsenal may increase incentives for an Indian first strike. India could use these missiles against Pakistan in several ways. They could be used for limited strikes against Pakistan, or to launch counterforce strikes,⁵⁵ thus forcing Pakistan to adopt a launch-on-warning posture. Such a scenario would be highly damaging to the strategic stability in South Asia, as the risk of inadvertent escalation of a potential conflict would be significantly increased.

Due to the geographical proximity and very less missile flight time, employment of hypersonic missiles does not afford any significant military advantage to India; however, these could possibly be used to deter Pakistan from the early

deployment of tactical nuclear weapons against India's limited conventional military operations as part of the Cold Start or Pro-Active Operations strategies.

Integrated Application of Emerging Technologies

Ultimately, it might not be the use of a single technology but rather the integration of several technologies and domains that constitutes the greatest threats to strategic stability in South Asia. It's possible that the use of AI-enabled drone swarms by India could be accompanied by a cyber-attack on Pakistan's communication infrastructure or an ASAT attack on its satellites. Whatever the case may be, Pakistan must prepare itself accordingly to mitigate the threats emanating from these technologies.

Overall, the direction that India is heading in within these emerging technologies and domains is clear: increased indigenous capabilities combined with growing technological collaboration with major states. Of particular concern for Pakistan would be how these capabilities could be integrated with the capabilities of the US and its allies, as outlined through the concept of ID. Despite India's claims that it simply wants to compete with China, these capabilities would certainly be available for use against Pakistan. India's LWD states that "capabilities will be enhanced to enable deterrence along our Western borders."⁵⁶

Charting a Course Forward for Pakistan: Integrated Response

The strengthening trend of the Indo-US strategic partnership has shown its impact on strategic stability in the region and how Pakistan is necessitated to respond appropriately to reinstate and preserve strategic stability. This suggests that the same pattern will continue. Furthermore, when the prospects of ID being employed in the region are considered, strategic stability may appear fickle unless appropriate measures are taken.

Regarding the development of and investment in the emerging technologies that have been analysed in the paper, Pakistan significantly lags behind India. This technological gap between India and Pakistan would further increase with the integration of India-US military and technological capabilities as part of the US-led ID posture.

With the US intending to enhance the military capabilities of its allies to act as a counter to China's capabilities and India's increasing willingness to initiate a conflict with Pakistan, the practical implementation of ID could result in increased Indian aggression towards Pakistan, and the creation of a plethora of new challenges for Pakistan's national security. This trajectory must be considered by the relevant decision-making circles in Pakistan that the deterrence equation may get more complicated, in political and technological domains, as time passes and that appropriate measures will be required. To respond to the challenges that ID may bring to the region, Pakistan requires an 'Integrated Response', which should consist of a

multi-domain approach while remaining cognizant of the country's economic constraints.

Pakistan's Integrated Response requires a political domain, especially given the geostrategic alignments and shifts taking shape on a global and regional level. With a continuing US-China competition, an evolving world order, and geostrategic alignments impacting the region, Pakistan must make sure that it actively pursues engagement with all states and refrains from aligning itself with any one side. Pakistan's economic constraints and dependencies do not leave any space for the state to align itself with any one side politically. Instead, it should advance its neutrality and cooperative engagements with all the major powers to further its national interests. Pakistan needs to capitalize on its diplomatic strengths in compliment to the politically non-aligned position.

As the paper has highlighted how ID may impact the region and create challenges for Pakistan, it is important to diplomatically engage friendly countries to communicate Pakistan's concerns. This should not be limited to a state-to-state level. The diplomacy component of Pakistan's Integrated Response should range from bilateral to multilateral engagement, inclusive of regional and international forums, to sensitize states on how it may create security concerns for the region and Pakistan. These forums can include the Shanghai Cooperation Organization (SCO), Organization of Islamic Countries, United Nations (UN), South Asian Association for Regional Cooperation (SAARC) and others where Pakistan has played an active role.

The technological aspect will also be crucial in Pakistan's Integrated Response. With India having made significant technological progress, it's only a matter of time before we see these being used in conflict, particularly against Pakistan. Pakistan's strategic policymakers must adequately consider that the spectrums of threats that FSD seeks to deter may be expanding and becoming intertwined with each other. Given this expansion and technological advancements complicating the spectrums, the fundamental understanding regarding FSD may need to be expanded as well to cater to the changing scenarios accordingly. This would mean an adjustment in the spectrum of capabilities as well as communicating clearly that the changing spectrum of threats will be met with an appropriate spectrum of capabilities that will be credible and adequate to deter any new or intertwined threats. Adjusting the spectrum of capabilities requires the integration of technological advancements and capability development in different aspects of the military's strength to ensure that credible minimum deterrence is maintained.

Additionally, Pakistan must improve itself technologically to ensure its national security. In the long term, this should include the creation of a vibrant technological ecosystem within Pakistan and an effective civil-military nexus to transfer knowledge of these dual-use technologies between industries. In the short term, however, Pakistan must focus on developing counterstrategies and technologies to India's superior technological capabilities. This will require effective policymaking to maximise outcomes given the fiscal constraints the country faces. A short-term

solution could be technology transfer and joint production and development initiatives with friendly states. Ultimately, however, Pakistan needs to prioritize the indigenous development of technologies for military and civilian purposes.

Conclusion

ID will not only guide US action but likely become a banner concept for policies worldwide. It is posited with the intent to deter any and all forms of conflict above and below the conventional armed conflict spectrum. One of its major components is the integration of emerging technologies with existing domains as well as on their own. Secondly, it officially states the use and development of a network of allies as a direct component of deterring adversaries, mainly China. When seen in conjunction, these two cornerstones of ID will impact South Asia and create challenges for Pakistan, especially when the Indo-US defense and strategic partnership is considered. Historically, India's capability development in military and strategic domains has challenged deterrence in South Asia by necessitating a response from Pakistan to maintain its deterrence. This is visible in FSD where the spectrum of threats from India is deterred through a spectrum of capabilities. Overtime, the spectrum of capabilities has evolved to an extent to maintain deterrence.

ID will affect regional dynamics in the future due to its network of allies, most specifically, which involves capability development and is inclusive of emerging technologies. This will add to India's relatively higher military capability in said areas of advanced technologies. Therefore, FSD could face two major implications in relation to what the 'full spectrum' entails. The first is its spectrum of threats, which could either expand or, at the very least, become more challenging to deter. Second, the spectrum of capabilities could become stressed in sufficiently deterring the increasing capabilities of space and cyber as military-based domains of deterrence and substantially enhanced existing domains through the use and integration of emerging technologies. The emerging technologies and domains with the most impact factor are AI, cyberspace, space, and hypersonic missiles. These technologies could completely alter the deterrence equation in South Asia and create several new threats to Pakistan's national security.

Given the challenges posed by ID, Pakistan requires an Integrated Response. This response should address the areas in which challenges will occur, which the paper has highlighted, and it has to be cognizant of the fiscal limitations faced by the country. The paper recommends that this Integrated Response rests on the following pillars: political neutrality, active diplomatic engagements, technological advancements and resulting military capability enhancement. Furthermore, it should be clearly and publicly communicated that, in light of FSD, changes in the spectrum of threats will be responded to through appropriate adjustment in the spectrum of capabilities.

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