



## Strategic Risk Management in Southern Asia

Feroz Hassan Khan

To cite this article: Feroz Hassan Khan (2022): Strategic Risk Management in Southern Asia, Journal for Peace and Nuclear Disarmament, DOI: [10.1080/25751654.2022.2136878](https://doi.org/10.1080/25751654.2022.2136878)

To link to this article: <https://doi.org/10.1080/25751654.2022.2136878>



© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group on behalf of the Nagasaki University.



Published online: 25 Oct 2022.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

# Strategic Risk Management in Southern Asia

Feroz Hassan Khan

Department of National Security Affairs, Naval Postgraduate School, Seaside, CA, USA

## ABSTRACT

Strategic stability at the China-India-Pakistan trijunction remains tenuous. The two dyads have endured conflicts over ideology, territorial disputes and power rivalry. Though drivers of conflict vary in each dyad, common aspirations and history of cooperative security agreements are worthy foundations for managing future strategic risks in Southern Asia. While each state in the strategic triangle faces nested security dilemmas, new sources of instabilities are compounding the strategic trilemma. Recent India-Pakistan (2019) and China-India (2020) military crises exposed the potential for multi-domain crisis escalation in future conflicts. Strategic risks increase either due to escalation dynamics in conflicts and/or inadvertence due to technical failures and incidents. This essay identifies three key strategic risks. First, faulty assessment of intentions and capabilities could lead to dangerous actions and counteractions. Second, nuclear-conventional entanglement of delivery systems may increase chances of blundering into accidental wars, as respective doctrines become murkier, communications become lesser, and military crises become more frequent. Third, fusion of accurate missiles systems with the emergent technologies is enabling cross-domain deterrence capabilities and providing decision-makers with multiple options to take greater risks during an evolving crisis. This article proposes that the three states consider new strategic risk-reduction measures through a series of multilateral and bilateral strategic dialogues at the Track-I and Track-II levels, and establish “strategic risk-reduction centers” customized to the Southern Asian strategic environment. These centers would function as central clearing house for all past and future agreements and act as nodal points for preventing misinterpretation or tragic incidents.

## ARTICLE HISTORY

Received 18 August 2022  
Accepted 12 October 2022

## KEYWORDS

Strategic risk; nested security dilemma; nuclear-conventional entanglements; disruptive technologies; cross-domain deterrence; strategic risk-reduction centers

## Introduction

An arc of instability exists in Asia that spans from Southern Asia to the Far East, which includes a pivotal region of three nuclear-armed states – China, India and Pakistan – that share a history of ideological, territorial and geopolitical rivalry. Territorially the three states meet at a trijunction of contested sub-regions – Kashmir, Xinjiang, Tibet – where territorial claims, separatist movements and cross-border clashes have frequented and

**CONTACT** Feroz Hassan Khan  [fhkhan@nps.edu](mailto:fhkhan@nps.edu)  Department of National Security Affairs, Naval Postgraduate School, Seaside, CA, USA

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group on behalf of the Nagasaki University. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

have lately drawn international concerns<sup>1</sup> China's meteoric rise in Asia has challenged American unipolarity at the system level, ushering in a new era of great power competition in Asia and consequently a strategic chain has evolved from China to India to Pakistan (Einhorn and Sidhu 2017).

China and India are recognized as rising Asian powers; both are competing for influence and resources at the system level and clashing at the regional level over disputed borders and territorial claims. India and Pakistan are regional rivals where the source of conflict began over the idea of partition of British India in 1947 and subsequently over competing claims on the erstwhile princely state of Jammu and Kashmir. Today, Kashmir is the "world's most militarized territorial dispute with portions under de facto administration of China (Aksai Chin), India (Jammu and Kashmir) and Pakistan (Azad Kashmir and Northern Areas)" (CIA 2022a). Pakistan identifies India as sole threat to its existence and firmly believes India has not accepted its sovereign existence. Fear of nation-state survival is ingrained in the strategic culture of the Pakistani state and as a result, national security and national identity are viewed through this lens, which exacerbates perceptions of risk behavior (Khan 2012).

Relations between China and India oscillate between military competition and economic cooperation. While China is the second largest economy in the world, Indian economy has seen consistent growth and promise. Pakistan's economy, in contrast, continues to face myriad challenges that place tremendous burden to maintain defense posture against India.

All three are modernizing their conventional and strategic nuclear forces, while facing new non-traditional security challenges. The induction of disruptive technologies in this milieu aggravates the strategic trilemma and compounds strategic stability in the region. The prospects of conflict resolution are dim, but there are opportunities for strategic risk-reduction and détente between the three countries. With assortment of emerging technologies in the mix of growing nuclear weapons and dual-use delivery systems in the inventories of the three countries, Southern Asia is now prone to accidental wars and crisis. It is now important to revisit the previous bilateral agreements and confidence-building measures and consider new institutionalized risk reduction measures to prevent military crises and accidental nuclear war. At risk is the future of nearly one-third of humanity in Asia and the world writ large.

This paper examines the prospects of *strategic risk reduction* measures between the three nuclear armed countries and suggests some policy recommendations for the leadership to consider. It has three sections. The first examines the drivers of the conflicts of three countries and explain the commonalties and differences between the two dyads (e.g. population, economic and power asymmetries) and determines the character of their interaction between the two dyads. The second section assesses the strategic risks by examining the existing strategic force postures and the impact of disruptive technologies that exacerbates risks and challenge strategic stability. The third section examines the

---

<sup>1</sup>In this article Southern Asia refers to the geographic region that includes Western China and South Asia. In Western China and Central Asia are landlocked regions with rugged, mountainous terrain and inhospitable conditions. South Asia provide access to the seas and connectivity to the outside world.

prospects of strategic risk reduction measures and proffers some practical crisis stability measures, new CBMs and ideas to normalize relations.

### **The Drivers of Conflicts: Differences and Commonalities**

China, India and Pakistan are often referred as a strategic triangle<sup>2</sup> On closer analysis, however, it becomes clearer that this triangle comprises two asymmetric dyadic rivalries. Though both nuclear-armed dyads have endured conflicts on ideology, territorial disputes and power differentials, the dynamics between the China- India dyad are quite different from those between India and Pakistan (Khan 2021a, 8). China is quite different from South Asian states in race, culture, language and strategic orientation compared to the common history, culture and ethos between India and Pakistan. Yet, the three states have common national threats from separatism, extremism and terrorism. New non-traditional security threats – pandemics, water security and climate change – now affect all states equally as each aspire for economic growth, security and prosperity for their people. These changed realities demand greater cooperation between them rather than recurring border crisis, coercive force deployments and warmongering. In the past, the two dyads have made several attempts to establish peace and security through confidence building measures, yet security competition has not abated. Should all three recognize commonalities and differences in their strategic relations, a future of cooperative security and détente between China and South Asia states is very much possible.

### ***Nested Security Trilemma***

Analyzing triangular relations among China, India, and Pakistan, requires determination of some basic principles about the nature of relations among the actors to establish whether strategic triangle exists and if so, what makes these relationships distinct. Strategic triangles are defined as “an intimate and interdependent relationship of three states whose existence creates a series of incentives and constraints for *cooperation* and *conflictual* behaviors among those states . . . each state identifies the other two as belonging to the category either of a security provider or a threat” [emphasis added] (Woo 2003, 50). Several scholars have determined “interdependence” as a key defining principle of a strategic triangle that describes the nature of relations either in conflict or in cooperation amongst the three countries. Thomas Schelling described “interdependent decisions” as a key factor where the decisions of all parties are influenced by what they think the others would do and Robert Jervis notes that in a triangular set up, strategies of states depend on the strategies of others (Schelling 1960, Chap.4; Jervis 1997, 44–48).

The history of inter-state relations between China, India and Pakistan indicates lack of *triangular interdependency* and absence of the centrality of the triangle in their policies. China considers itself in a different league. It competes at the system level with United States and Russia and does not consider India as a peer rival. Some Chinese scholars allege India of “using an imagined enemy to justify its pursuit of great power politics, games, and military ambition” (Saalman 2020). According to a Rand Corporation study, China is confronted with several “nested security dilemmas” that include Far East,

---

<sup>2</sup>For explanations of “Strategic Triangles” see Dittmer (1981); Segal (1982); Crawford (2003)..

Southeast and South Asia regions. Of late China is concerned with India's developing partnership with United States (Heginbotham et al. 2017, 69–95).

Given its size, history, culture, and democratic credentials, India sees its “tryst with destiny” as the dominant power in South Asia and seeks place in the world order.<sup>3</sup> While Western powers led by the United States, are propping up India to counterbalance China, India's conflicts with neighbors, its internal security issues and uneven economic distribution have seemingly dented India's national potential. India is frustrated with China's ingress into India's neighborhood that undermines India's aspirations of an Indian version of Monroe doctrine in South Asia and Indian Ocean region (IOR) (Hagerty 1991, 352). Further, India firmly believes China has enabled its arch-rival Pakistan with political and strategic support to challenge India's rise and perceives a China-Pakistan “collusive threat” to India (Singh 2021).

Pakistan has no aspirations of a major power status, but it steadfastly defends its sovereignty and is determined to prevent what it believes in India's bid for hegemony in South Asia. Pakistan also confronts new threats from potential chaos on its western border with Afghanistan. Compared to China and India, Pakistan is much smaller in size and lacks strategic depth. Given the history of wars, crises and tensions with both neighbors and internal security problems, Pakistan continues to exist in a security-intensive environment, even as it attempts to shift its national security priority from geostrategy to geo-economics. Islamabad relies on its nuclear capability as independent variable in its security calculus and leverages its geostrategic location at the crossroads of South and Central Asia to its advantage in bargaining with major powers for economic investments and strategic balancing that Canadian scholar T.V. Paul describes as “power of the weak” (Paul 2019, 51).

While both external and internal drivers shape the evolution of security policies in all countries, competitive behavior dominates regional politics and arms racing continues in the two dyads. Each country's principal threat hypothesis is from a larger and more powerful neighbor whose ambitions and national objectives clash with the national security of the weaker neighbor. China's rise and outreach in Asia undercuts India's rise and affects its zone of influence. Similarly, India's dominance of the Subcontinent makes its neighbors fearful of India's rise and hegemonic ambitions. Pakistan sees India as an existential threat and is unwilling to accept India's dominance in South Asia. This triangular security posture manifests in the two dyads.

### ***Commonalties and Differences***

China, India and Pakistan gained independence almost at the same time. The end of colonial era heralded a spirit of Asian brotherhood that initially brought China and South Asian states closer as all three have similar aspirations and national objectives such as state consolidation, defense, economic prosperity, and nation-building. But failure to resolve the conflicts in earlier years allowed the geopolitics of the Cold War and intra-regional rivalries to dominate policies and consequently the early promise of

---

<sup>3</sup>Jawaharlal Nehru, “Not Forgotten: The ‘Tryst with Destiny’ Speech that Divided India and Pakistan,” *New York Times*, 14 August 2016, <https://www.nytimes.com/interactive/projects/cp/obituaries/archives/india-pakistan>.

a cooperative security future drifted into hardened nationalism and gradually transformed their interstate relations into two competing dyads.

China and India are easily comparable as two Asian giants in terms of population, economy and military strength. Both are large countries with huge population (China: 1.4 B; India: 1.3 B) and immense economic potential (China GDP is \$ 14.9 trillion nominal and \$ 24.22 trillion in PPP terms; India GDP is \$ 2.6 trillion in nominal terms and \$ 8.7 trillion in PPP terms) and both have huge demand for trade and energy (Roche 2022). Both possess large militaries (China: 2 million; India: 1.4 million). In sea power China has 137 warships, 744 submarines and two aircraft carriers compared to India's 42 warships, 16 submarines and one aircraft carrier. In terms of air power China has 3210 aircrafts compared to India's 2123<sup>4</sup> Pakistan is comparatively smaller but dwarfed by China and India. Its 238 million population is large given its geographical size (796, 095 square kilometers), with a prostrate economy despite an unrealized economic potential<sup>5</sup> Pakistan has a sizeable military force (640,000) which is half the size of India. It has limited sea power with 26 warships and eight submarines and has no aircraft carrier. Similarly, its airpower is limited to 413 combat capable aircraft.

China's current nuclear warheads are about twice that of India (350: 150) (SIPRI 2021). In delivery means China's longest-range missile is the *DF- 41* with 10, 000 kilometers (km) to India's *Agni- V* with 5000 km. In terms of second-strike capabilities, China has two types of nuclear-powered attack submarines (Type 093 and Type 091) in service; India has *Arihant* operational and *Arighat* that is soon to be commissioned. Pakistan nuclear warheads are reported to be approximately 165 (which includes short range battlefield weapons) and its longest- range ballistic missile *Shaheen- III* is about 2750 km. that covers the Indian Subcontinent (IISS 2021, 290–293; SIPRI 2021). Pakistan has no nuclear-powered submarine but has a naval strategic command and is reported to field nuclear weapons on a conventional diesel submarine, as an interim second-strike capability.

From these comparative military power, it becomes clear that China and India are vying for power projection capabilities, whereas Pakistan is balancing against India with reliance on nuclear weapons to offset conventional asymmetry.

### ***Reconciling Economic Cooperation and Military Competition***

Despite global recession, pandemic, and periodic border clashes, bilateral trade and economic relations between China and India have continued and are estimated to have crossed \$ 100 billion in 2021 (Krishnan 2021). In stark contrast there has been negligible economic relations between India and Pakistan, which is primarily responsible for the failure of regionalism in South Asia and rendered the regional organization South Asian Association for Regional Cooperation (SAARC) ineffective. After the recent military crisis between India and China some sort of “new realities” have emerged in the character of political relationship between China and India that is defined by hostility and distrust (Tarapore 2021, 6). The tension at Line of Actual Control (LAC) on the disputed border regions has increased since the summer 2020 Ladakh crisis. India faces the dilemma balancing between military modernization for border contingencies (with China and

<sup>4</sup>Figures presented in a US-India Track II Strategic Dialogue webinar in March 2021 under Chatham house rules..

<sup>5</sup>Figures drawn from CIA' World Factbook (CIA 2022b); also see Suleri (2021)..

Pakistan) and managing maritime exigencies and naval competition with China in the Indo-Pacific (Tarapore 2021, 2).

In contrast, despite close strategic relations for nearly six decades China and Pakistan have had hardly any worthwhile economic activities between them. It is only after China unleashed its ambitious Belt and Road Initiative (BRI) that included the flagship China-Pakistan Economic Corridor (CPEC) under which Chinese has pledged investments of over \$ 70 Billion (with more expected). CPEC provides BRI the vital link of landlocked Central Asia to the Arabian Sea. The two countries are now beginning to transform their strategic partnership from primarily military and nuclear cooperation into broader geo-economic sphere. Additionally, since the withdrawal of US forces from Afghanistan, a security vacuum exists that directly affects Pakistan and Chinese interests. From China's perspective, maintaining peace and stability in the South-Central Asian region is important for China to control Uighur's separatist movement in Xinjiang province as well as future progress of BRI. China views Pakistan's role as crucial in these objectives.

### ***Collusive Threat Perception***

Apart from deepening its strategic partnership with United States, India is committing more in the Quadrilateral Security Dialogue (Quad) with Japan, Australia and United States and expanded its annual naval exercises MALABAR, to include many other nations, as means of signaling to China, India's greater alignment potential (Tarapore 2021, 2). At the same time India believes China is encircling India by establishing a "string of pearls" of strategic bases on key coastlines and islands in the Indian Ocean. After India-Pakistan crisis across LOC in divided Kashmir and India - China LAC crisis, India military perceives a two front challenge with perceived operational or tactical collaboration between China and Pakistan. In January 2021, Indian Army Chief General Naravane publicly expressed his anxiety, "There is no doubt China and Pakistan together form a potent threat for India and the threat of collusivity cannot be wished away. The collusive threat is not a strategic paper or talk . . . it's manifesting itself on ground" (Pandit 2021).

Likewise, Pakistan has long perceived two-front situation both on its eastern and western borders with an India-Afghanistan collusive threat that places Pakistan in a nutcracker (Khan 2012, 97, 207). Until Taliban re-takeover in Afghanistan in 2021, Pakistan accused India of abetting cross-border attacks and support of Baluchistan separatist insurgency from Afghanistan. Further, India is investing in Iran's Chahbahar port (located about 100 kilometers West of Pakistan's Gwadar port that China is developing), which links via roads into Afghanistan. Pakistan thus sees India encircling Pakistan via Iran, Afghanistan and Central Asia. In sum, China perceives United States, India views China and Pakistan sees India encircling each other.

As realpolitik grips Asia power politics, the China, India, Pakistan trio form a classic Machiavellian act of strategic balancing and alliances. The existential challenges are compounding due to the character of evolving power politics at the system level and intermittent regional crises. Despite common threats and similar aspirations, strategic competition in the two dyads appears to be the more likely prognosis. The next section assesses the factors contributing to the growing strategic risks in Southern Asia.

## Strategic Risks: An Assessment

French scholar Corentin Brustlein defined strategic risk as any factor that triggers a crisis between nuclear armed states and/or any development or event that alters status quo constitute risks (Brustlein 2021). He identifies two types of strategic risks that are making threat hypotheses and strategic risk assessment muddier. The first risk arises from escalation of conflict dynamics in either dyads that could result in deployment or possible use of nuclear weapons. The second risk could rise from technical incidents that could induce accidental launch and/or from misperceptions of intent and/ or capabilities of the adversaries. On 9 March 2022, India accidentally launched a *Brahmos* cruise missile that landed in Pakistan. Luckily, neither the incident cause significant damage, nor did it escalate into crisis, however this was the “first inadvertent launch of a cruise or ballistic missile by one nuclear power unto the territory of another nuclear power” (Clary 2022). These probabilities are increasing because of entanglement of dual-capable missile systems and assortment of disruptive technologies, now in the inventories in both dyads.

Strategic risks compound due to misperceptions and excessive reading of intentions and capabilities. Typically, defensive or evasive steps of one side to reduce vulnerability or defensive preparation by one side is often misperceived as offensive intent (Jervis 1976, 64). China, India and Pakistan are balancing contingencies on multiple fronts. In each dyad the weaker power has mobilization advantage in conventional force deployment over the stronger power (India over China; Pakistan over India). Few years back, China-India relations were assessed to be stable even when their military doctrines were becoming more offensive (Markey 2015).

As India and China improve infrastructure development in the rugged and inhospitable terrain and undertake military modernizations, it is eroding the Himalayan barrier. As large-scale and inter-theater movement becomes more practicable, either side would be unable to distinguish between local tactical mobilization and theater-wide mobilization – further spoiling perceptions of each other’s intentions and capabilities. Lessons from recent crisis in the two dyads indicate probabilities of land crisis extending into other domains that increases strategic risks potential and could impact on existing status quo of nuclear deployment.

### ***Extension of Land Border Confrontation to Seas or Other Domains***

In the case of India and Pakistan border tensions remain high despite reinstating cease-fire on the LOC in early 2021. During the 2019 India-Pakistan military crisis, India threatened use of nuclear capable missiles and send nuclear-powered ballistic missile carrying submarine (SSBN) *Arihant* on patrol in the midst of crisis and Pakistan held a national command authority (NCA) that created an uncomfortable specter for escalation and nuclear signaling. Similarly, in the midst 2020 China- India border crisis in Ladakh, India deployed warship in South China Sea and near Malacca straits that China protested (Times of India 2020).

The propensity of land-based crisis extending to the sea would complicate crisis stability in the Indo-Pacific region where the maritime environment is already grappling with the introduction of sea-based strategic deterrent. Nuclear weapons at sea have



several implications for naval operations and myriad concerns on operational safety, security and related command and communications challenges.

In sum, strategic risks are compounding due to combination of three factors. First is the dismissive attitude of weaker adversary's concerns which increase propensity of military crisis within the two dyads. Second, the growth in military and strategic arsenals is muddling the perceptions of intentions and capabilities of adversaries and encouraging arms racing. Third risk comes from the introduction of disruptive technologies into the mix of military modernizations in the three countries.

### ***Dismissive of Weaker Power Concerns***

For the foreseeable future, Beijing's primary focus would remain on United States even when it considers neighboring regional states into its strategic calculus especially its nuclear relationship with South Asia (Heginbotham et al. 2017). Chinese strategic thinking deliberately avoids any notion that includes China with India and Pakistan (Saalman 2020). In the same vein, India is unwilling to accept any semblance of parity with Pakistan and rejects any proposal that binds India into a regional agreement. Pakistan is concerned with India's strategic orientation that has only marginally adjusted after the recent military crises with China (Tarapore 2021; Shukla 2021). For the past five decades invasions and wars in Afghanistan, Kashmir and multiple military crises and nuclear competition have taken a heavy toll on the region – especially on Pakistan's economy and internal security. Yet, no conscious effort to break the ice and reach a détente or modus vivendi has been made in both dyads.

In the final analysis, the bigger power has created self-justification neither to engage with nor give any unilateral concessions to the smaller power. Rather, in each dyad the stronger party compels the weaker party to engage in a debilitating arms race in the hope that the weaker contestant would exhaust itself and give up. Herein lies the nub of risk – miscalculations and a huge challenge in inaugurating strategic risk reduction measures.

### ***Growth of Military and Strategic Weapons Development***

Technological maturations and induction of variety of missiles and entanglement of dual-use vectors adds to risk assessment regarding offensive and defensive intents. Precision Guided Munitions (PGMs), standoff weapons and cyber capabilities are enabling counterforce capabilities and creating a complex framework that risks crisis stability.

### ***China's Strategic Force Developments***

China is modernizing and diversifying its nuclear forces as part of a long-term plan to develop a more survivable and robust deterrence posture that relies on a nuclear strategy of assured retaliation (Cunningham and Taylor Fravel 2015). In one assessment, China's nuclear inventory has surpassed France with a total of 350 warheads and is now believed to be world's third largest (Kristensen and Korda 2020; SIPRI 2021). However, given China's compulsion of balancing multiple regional contingencies, not the entirety of China's military deployment and strategic arsenals would necessarily pose direct threat to India.

In 2018, a Carnegie Endowment study notes that out of China's seven military regions operating under PLA's five joint services "theatre commands", two military regions (Lanzhou and Chengdu) under China's Western Theatre Command are located nearest to "India-related contingencies" (O'Donnell 2018). These forces are estimated to be between 90,000–120,000, which are disposed to be around 40,000 in Tibet and about 70,000 in Xinjiang. In contrast, India has positioned about 221,000 forces closer to the disputed border areas against these Chinese forces. With US intelligence-sharing, improved communication infrastructure and shorter distances on the Himalayan borders, Indian military could mobilize and hold "key conventional advantage over Chinese forces". On its part, China has a much more sophisticated logistic system and capacity to rapidly mobilize forces and swiftly reinforce against any Indian move. The study further assesses, Indian Air Force (IAF) would also be able to operate effectively – especially with "Sukhoi Su-30 MKI and Dassault Rafale fighter aircraft and opening of multiple new advanced landing grounds (ALGs) (O'Donnell 2018, 1, 13–14).

Chinese nuclear forces comprise triad of land and sea-based ballistic missiles and aircrafts. In Frank O'Donnell's assessment, China's three DF-21 land-based missiles bases (with ranges of 1.335 miles) in the Western theatre command are most relevant to targeting India. Additionally, DF-31 and DF 31-A (with ranges of 4350 and 6830 miles respectively) are capable of targeting, if necessary (O'Donnell 2018, 16). Harvard's Belfer Center's study estimates about "104 Chinese missiles could strike all or parts of India". This study identifies about "a dozen DF-31A and six to twelve DF-31 missiles capable of reaching all Indian mainland targets. Another dozen DF-21s could hold New Delhi at risk. The remaining missiles can target sections of India's northeast and east coast" (O'Donnell and Bollfrass 2020). Belfer Center Study further assesses, "India's two squadrons of Jaguar IS and one squadron of Mirage 2000 H fighters (totaling around 51 aircraft) may be tasked with nuclear missions" (O'Donnell and Bollfrass 2020). At best, India could achieve initial surprise in missions over Tibet, but the Chinese air defenses would track and intercept Indian penetration before the aircrafts intrude deeper (O'Donnell and Bollfrass 2020).

While the above hypotheses are based on capabilities and disposition of forces, it is difficult for Indian strategic planners to assess China's intentions and capabilities, India has to rely on Washington's strategic and intelligence assessment to prevent a surprise Chinese attack.

### ***India Strategic Development***

Chinese experts scoff at India's perception of China as its enemy, however, Lora Saalman notes that China closely "catalogues India military programmes, particularly in maritime and aerospace". Of particular concerns, she notes, are the implications of introduction of "Aerobic Vehicle for Trans-atmospheric Hypersonic Aerospace transportation (AVATAR) and Hypersonic Technology Demonstrator Vehicle (HSTDV), the BrahMos cruise missile, the Agni-III and Agni-V ballistic missiles, the Su-30MKI combat aircraft and the Arihant-class submarine" (Saalman 2020). Belfer Center Study estimates, around ten Agni-III launchers are capable of reaching China's mainland, whilst another eight Agni-II launchers could reach targets in central China. As Western technologies enable India to extend its strategic reach with IRBMs and ICBMs and China analyzes the

impact of Indo-Pacific and Quad strategies, it is beginning to view India as a more serious threat.

### ***Pakistan's Strategic Development***

The pace of Indian military development is intensifying Pakistan's strategic anxiety. Bulk of India's conventional defense forces – including the three offensive strike corps – are deployed against Pakistan and its dual-capable missile ranges cover the entire territory making Pakistan vulnerable to military exploitation and strategic coercion. Pakistan conventional defense forces are deployed on its eastern border with India with garrisons located closer to border areas. Just like India has mobilization advantage over China, Pakistan land forces can quickly mobilize into their defensive positions and deny India the element of surprise attack against Pakistan. For the past two decades Pakistani defense forces were depleted and shifted to secure its western tribal borderlands with Afghanistan for counterinsurgency and defense. Though regional strategic dynamics have changed, especially after US withdrawal from Afghanistan, Pakistan forces are strengthening the border with Afghanistan.

Unlike India, Pakistan does not have fifth generation modern aircrafts – that could balance in air force. Additionally, Pakistan has a single coastline that is vulnerable to India's naval blockade in the Northern Arabian Sea. To reduce the level of disparity, Pakistan turns to China, but Chinese assistance is not sufficient to enable Pakistan to meet multiple conventional force contingencies. Islamabad therefore depends even more on nuclear weapons to offset its force imbalance with India. Pakistan's longest range of land based nuclear capable ballistic missile is Shaheen-III with a declared range of 2750 kilometers and shortest nuclear capable missile Hatf-IX (Nasr) has a declared range of 60 kilometers. Additionally, Pakistan has land and air cruise missile and sea-based nuclear weapons on conventional submarines.

### ***Doctrinal Dissonance***

The risk assessment gets even murkier when China's declared official doctrines often reiterate its policy of assurance. In 2019 the Chinese Government reaffirmed its commitment to “a nuclear policy of no first use of nuclear weapons at any time and under any circumstances, and not using or threatening to use nuclear weapons against non-nuclear-weapon states or nuclear-weapon-free zones unconditionally . . . China does not engage in any nuclear arms race with any other country and keeps its nuclear capabilities at the minimum level required for national security”.<sup>6</sup> India seems less impressed with the Chinese assurances. India seeks to ensure the survivability of its forces through adequate force dispersal, distributing its forces across several bases and along several vectors (air, land, and sea), while seeking to ensure the secrecy of their locations (O'Donnell and Bollfrass 2020).

Likewise, Pakistan is dismissive of India's official no-first use pledge. Pakistan has not announced its formal nuclear doctrine and maintains an ambiguous posture, though at various times Pakistani leaders have made statements reflecting the contours of their doctrinal thinking. Pakistan maintains a first use nuclear doctrine and the primary role of its nuclear weapons is to offset the conventional and nuclear imbalance against India.

---

<sup>6</sup>State Council Information Office of the People's Republic of China 2019, cited in Kristensen and Korda (2020).

Pakistan has explicitly declared that its “nuclear weapons are aimed solely at India” and would be used only “if the very existence of Pakistan as at stake” (Lavoy 2007). Pakistan’s evolving nuclear posture has been described as one of “asymmetric escalation” to balance against India’s conventional force superiority and undertakes military modernization in tandem with India its strategic force modernization (Narang 2014, 2). In response to India’s innovative military doctrines (“Cold Start”) that envisages a limited conventional war under the nuclear umbrella, Pakistan has promised a “quid pro quo plus” response and a “full spectrum nuclear deterrence”. This policy implies that Pakistan’s response to any cross-border military operation from India would be a step more than tit-for-tat – a notch up the escalation ladder while still maintaining the threat of nuclear retaliation at every rung of the ladder (Kidwai 2020).

### ***Impact of New Disruptive Technologies***

Disruptive technologies in the evolving strategic competition in the two dyads further complicate the tenuous strategic stability Southern Asia. Assortment of new technologies offer decision makers with wide spectrum of kinetic and non-kinetic options that may replace employment of traditional military instrument. Use of accurate cruise missiles, PGMs, Standoff Weapon (SW) systems, drones and remote sensing capabilities allows tempting vectors to undercut deterrence stability. Similarly, militarization of space and cyberwarfare are new domains affecting cross-domain deterrence (Mallory 2018, 1).

### ***Accurate Missile Systems: Hypersonic Weapons, Cruise, PGMs***

Recent conflicts in Middle East and Azerbaijan-Armenia conflict demonstrated effective application of accurate missile system and unmanned aerial vehicles (UAV), or drones that portend future wars.<sup>7</sup> These technologies could be used against military targets as well as civilian targets such as petrochemical plants, gas pipelines, and vulnerable communications without crossing international borders. India used SPICE bomb in Balakot Crisis in February 2019 crisis and Pakistan responded with its own standoff weapons (Makunth 2019).

Hypersonic weapons and accurate missile systems provide offensive strike advantages and could overpower missile defenses. Lately China demonstrated hypersonic weapons capability that have the ability to travel up to Mach 5 and above about 40–100 kilometers into the outer atmosphere. Besides high speeds and ability hypersonic systems can reach long distance, these weapons are maneuverable and difficult to detect and intercept, which some US experts described as a “Sputnik moment”.<sup>8</sup> Reportedly, since 2018 China is also working on a hypersonic cruise missile (Xingkong-2 “wave rider”), but as of yet no public information is available (Liu 2020).

---

<sup>7</sup>The United States Air Force defines unmanned aerial systems as ‘A powered, aerial vehicle that does not carry a human operator, uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely, can be expendable or recoverable, and can carry a lethal or non-lethal payload’ (Office of the Secretary of Defense 2005).

<sup>8</sup>Hypersonic weapons are of two types: hypersonic glide vehicles (HGVs) and hypersonic cruise missiles (HCMs) (Cummings 2020).

China's demonstration has affected India's threat perceptions. India is reported to have had trials of hypersonic technology demonstrator vehicle (HSDTV) in 2020 – capable of reaching 6.5 Mach at an altitude of 32 km after making use of solid rocket launched booster (Noronha 2019, 103–108). The combination of operational HSTDV with Multiple Independent Re-entry Vehicles (MIRVs) and Ballistic Missile Defenses (BMD) capabilities – including acquisition of Russia's S-400 – will enable India with counterforce options against Pakistan nuclear deployment, including against battlefield nuclear weapons. Historically, Pakistan has responded to Indian missile development, so most likely Pakistan would also begin its own hypersonic program. Pakistan believes India's new missile systems threaten Pakistan more than China and challenge its nuclear deterrence and risk “courting action- reaction dynamic with Pakistan” (Sultan 2021).

### **Drones**

Drones have operated for a while in counter terrorism operation the Afghan-Pakistan borderlands that were operable in uncontested space. Technological advances now allow drones to operate in hostile environment. Drones are not just new low-cost weapons that saves treasure and blood (lives of pilots), they provide continuous surveillance and precision targeting and offer effective tools of coercion (Zegart 2020). More recently lethal drones with relatively sophisticate capabilities are available with low costs that have been employed in combat world-wide including in South Asia (Bergen, Salyk-Virk, and Serman 2020). Drones include several types and one such type are *loitering munitions* that are either semi or fully autonomous that are programed to attack the target. Such drones can operate individually or in swarms in kamikaze attacks. These characteristics of drones (unmanned aerial vehicles) enable political decision makers to authorize use of force more easily than use of traditional military forces (manned aircraft). Drone warfare and “anti-drone counter veiling measures” are real probabilities that would shape future battlefields conditions.

### **Space**

James Clay Moltz observes that “Asian countries see space largely as an extension of other competitive realms and are carefully watching regional rivals, attempting to match or at least to check their capabilities, influence, and power” (Moltz 2012, 2). Over last three decades China and India are making their mark in the space domain. China's Beidou global navigation satellite system (GNSS) has been operational since 2003 and reached full operational capability in 2020 (Dotson 2020). Some scholars have argued that “Beijing clearly intends to promote Beidou as a worldwide alternative to the US GPS network – and to use the ‘Space Silk Road’ as another channel to expand its influence throughout Eurasia, and beyond” (Dotson 2020). India has extensive plans to launch missions in space to include launch vehicles and several satellites.

Pakistan generally lags in space investments, however, with growing as explained above, Pakistan would be relying on China for space collaboration. China's *People's Daily* reports “China is expanding its ‘circle of friends’ among the Belt and Road countries by taking an active role in serving those countries with advanced space technologies” (Hua 2017). In 2022, China intends to launch its international space station that will host nine scientific projects from 17 nations (Lei 2021). Pakistan is certain to

take advantage of the space information corridor being part of the BRI that will out-compete India (Sarma 2019).

China and India have demonstrated anti-satellite (ASAT) weapon capabilities that has expanded the Sino-Indian rivalry into military space. China has mature ASAT capability against satellites in low earth orbit (LEO), and experimental capabilities in the higher medium earth orbit (MEO) and geostationary orbits (GEO) (Secure World Foundation 2020, 35). China's ASAT demonstration drew immediate concern in India. Indian Air Chief Marshal P.V. Naik is quoted in a 2010 lecture saying, "our satellites are vulnerable to ASAT weapon systems because our neighborhood possesses one" (Gopalaswamy and Pant 2010). Nine years later India matched the Chinese capability, conducting their own ASAT demonstration on 27 March 2019 (Ministry of External Affairs (India) 2019). Should China and India commence destroying each other's early warning satellites and blinding each other's satellites to prevent detection of deployment and mobilization of military and nuclear forces, it would guarantee instability and worse consequences for Asia.

### ***Cyber Weapons***

Use of cyber weapons is no longer hypothetical and it is a low-cost investment in targeting critical military systems, command and control systems and economic targets – such as electric power supplies, banking system and gas supply systems. In October 2020, Chinese hackers allegedly carried out cyberattacks resulting in electrical blackout in Mumbai. India put a ban on fifty-nine Chinese web apps (WeChat and Tik-Tok) as well as placed new barriers for Chinese companies in several India's infrastructure projects.

Cyber-attacks and cyber defense are becoming new norms and as systems become artificial intelligence (AI) enabled, there is growing concerns of machines taking over human assessments and decisions. Future cyberattacks on critical infrastructure and other economic targets, which underscores how economic relations instead of mitigating crisis would become sources of vulnerabilities and target itself.

### ***Directed Energy Weapons (DEWS)***

There are reports of developments of non-explosive systems such as Dedicated Energy Weapons (DEWs) and High-Powered Lasers in the region. These weapons are capable of emitting high powered lasers, radio waves, electromagnetic radiation and microwaves that can damage electronic systems making intended targets dysfunctional without physically destroying them.

There were contradicting reports of China's use of DEW during the India-China crisis in Ladakh region<sup>9</sup> India, however promptly denied any use of such weapons (Hamling 2020). Regardless, such unconventional platforms in future would be available as technologies mature – particularly as drone wars and anti-drone technologies shape the future battlefield.

Based on the above analysis, three key strategic risks can be identified that could interchangeably apply to both dyads. First, faulty assessment of intentions and

---

<sup>9</sup>A Chinese professor had claimed that China used DEW to compel India vacate territory on Chushul range in the Pangong Tso Lake (Makichuk 2020)..

capabilities could lead to dangerous actions and counteractions. Second, nuclear-conventional entanglement of delivery systems may increase chances of blundering into accidental wars, as respective doctrines become murkier, communications lesser, and military crises frequent. Third, fusion of accurate missiles systems with the emergence technologies is enabling decision-makers with multiple options to take greater risks during evolving crisis and providing cross-domain deterrence capabilities.

Given the above strategic risks, time has come to consider strategic risk-reduction measures and break the impasse in Southern Asia. The next section examines such measures and proffer some proposals.

## Strategic Risk-Reduction Measures

Strategic risk-reduction is defined as a “set of unilateral, bilateral and multilateral measures aimed at lowering the likelihood of nuclear weapons use, through improved communications, predictability, and restraints” (Brustlein 2021, 63). It is important to create an atmosphere of compromise and accommodation to assuage security concerns of all parties. For this an overarching condition for peace and security is a prerequisite to make practical sense of the strategic risk reductions measures proposed in this paper. As a starter, the three states may consider reviving the erstwhile *Panchsheel* spirit and adopt principle of non-use of force and peaceful settlement of disputes<sup>10</sup> Once conducive environments are obtained, states become less sensitive and more amenable to new CBMs.

Assessing the current state of affairs in the region, several risk-reduction proposals are divided in two categories. The first category includes proposals for Track-I considerations and second for Track-II deliberations. Those measures proposed measures that require immediate attention or are less sensitive are suggested for Track-I. The second category proposals are deemed more sensitive and may require greater deliberations for acceptance under present conditions. Track-IIs are free from inhibitions and are best suited for providing out-of-box solutions. Many of the CBMs and risk-reduction measures proposed here have been considered in multiple publications, seminars, and some of them discussed officially and unofficially at various levels and/or are partially in practice.

### Track-I Proposals

While China and India are engaged in competitive and cooperative mix in their relations, both sides are able to communicate and diffuse crisis bilaterally. This is not the case between India and Pakistan where outside intervention (primarily United States) has invariably diffused a burgeoning crisis. No formal strategic restraint arrangement on nuclear weapons and their delivery means exists in both dyads, however, all three have conventional military CBMs signed in the 1990s that could form a baseline for developing into a peace and security architecture (Khan 2021a). These agreements are necessary but insufficient to ensure stability in future.

---

<sup>10</sup>China and India the *Panchsheel Agreement* in 1954 that included Five Principles of Peaceful Coexistence..

The growing strategic competition between China and the United States is having a cascading impact on Asia, which means that international community has stakes in strategic risk-reductions in Southern Asia. The risks identified above could mitigate with multilateral engagements involving other powers. All three states now need to agree engaging in either separate bilateral dialogues or a dialogue on strategic restraints (Khan 2021b). Several scholars have suggested organizing a multilateral Asian strategic stability dialogue involving P5 + 2 (China, France, Russia, the United Kingdom and the United States, plus India and Pakistan) and other stake holders in Asia (Saalman and Topychkanov 2021). Whichever forum the three states could agree, I propose considering some priority proposals at Track-I level.

### ***Multilateral Political-Military Strategic Dialogues***

China's refusal to discuss strategic weapons issues with South Asia and India's policy of isolating Pakistan is ultimately counterproductive for all three. Further India has consistently resisted any suggestion of outside interference to resolve its conflict with Pakistan. Of late, India seems less resistant to US or Russian facilitation in the China-India disputes. Russia's ability to provide platform during the 2020 border crisis sets a good precedent. US scholar Dan Markey proposes the United States should initiate separate strategic dialogues with China and India and try finding "compromise options and new CBMs" (Markey 2015). There are other complications as well because of nuclear status of India and Pakistan and China's absence from US- Russia arms control engagements. Several international scholars advocate utilizing some existing forums (such as Shanghai Cooperation Organization (SCO) for a trilateral or multilateral engagement on these issues (Saalman and Topychkanov 2021; Khan 2021a). SCO has four nuclear armed countries, and it could be a starting point for a multilateral engagement. Still better to hold a broader Asian stability dialogue. I propose two separate level engagements – political and military.

The political level engagement could be multilateral level. It would take on comprehensive overview of interstate relations and establish means of communication between the political leadership and diplomatic level. China, India and Pakistan may consider negotiating a South Asian version of agreement that is analogous to two Cold War agreements between the Soviet Union and the United States: "Measures to Reduce Risk of Outbreak of Nuclear War (30 September 1971)" and "Prevention of Nuclear War (23 June 1973)". Drawing from Cold War precedents and existing CBMs in the two dyads, the political engagement could consider agreeing to following clauses as a sample at [Annex A](#) to this paper:

The military forum may initially start bilaterally and progress to trilateral or multilateral level. On the military engagement, I propose direct meetings of the military chiefs and subsequent establishment of joint working groups and to upgrade military-to-military interactions (including direct hotlines between military chiefs, and multiple hotlines at the functional level (especially in critical cross border areas, in air and sea domains). Military interactions would consider examining four areas: 1) examine and revive existing agreements and make amends where necessary; 2) analyze recent military crises in both dyads and suggest new CBMs (including air forces and naval forces); 3) evaluate impact of ongoing strategic modernizations including nuclear-conventional entanglements of delivery systems; and 4) analyze the implications of disruptive



technologies (cyber capabilities, artificial intelligence and autonomous weapons) and suggest new CBMs.

### ***Information Exchanges***

There is a healthy precedence of information exchanges on lists of nuclear installations between India and Pakistan. However, this CBM was not expanded further. I propose a multilateral or bilateral group of officials to examine the pros and cons of enhancing such information exchanges to include transparency on military budgets, command locations and force levels, and radiological data or unexplained nuclear incidents – for example reports on theft of fissile material. This group may expand to exchange any data on nuclear security best practices and consider including nontraditional threats like pandemics, climate change or such common threats on floods and locusts etc.

### ***Maritime Dialogues***

There are significant developments in the maritime domain especially with the increase of China and India's maritime activities in the Indo-Pacific and Indian Ocean regions that has raised concerns in all three countries. There are several areas of engagement that China, India and Pakistan could take: such as understanding the consequences of accidents or incidents at sea; an agreement on notification of nuclear accidents at sea; discussions on practical steps to avoid incidents; set peacetime rules of engagements; and develop maritime communications to avoid unwanted incidents and de-escalate crisis.

### ***Multilateral Dialogues on Arms Control in Outer Space***

While the UN Conference on Disarmament in Geneva forum on the "Prevention of Arms Race in Outer Space" (PAROS) remains in a limbo, competition in space and counter space between China and India is intensifying. ASAT demonstration has a potential to destroy each other's early warning satellites that could blind each other's capacity to prevent detection of deployment and mobilization of military and nuclear forces. This domain demands immediate discussions amongst all stakeholders.

A multilateral agreement on prohibition on ASAT tests and on targeting command and control assets in outer space ought to be on priority of international security. Further this forum could explore new CBMs such as cooperation in the civilian space, scientific research, deep-space exploration and activities that could provide benefits to economies of Asian countries and positive impact on humanity<sup>11</sup>

While the three governments may not be ready to consider the above proposals at the official policy level, they may explore some proposals at Track 1.5 or Track II levels for better analyses.

### ***Track-II Proposals***

Below are some proposals whose time is yet to come but the three countries could consider at the track-II level and reflect before contemplating it at track1 level.

---

<sup>11</sup>China has signed cooperative agreements with 37 countries and four international organizations as part of its "Space Information Corridor" and other international space cooperation efforts (Xinhua 2018)..

### ***Multilateral or Trilateral Strategic Restraint Agreement***

This Track-II forum would examine military and nuclear doctrines, analyze conditions for strategic CBMs and consider amalgamating agreed bilateral conventional CBMs into trilateral conventional military restraint agreement. China and India have declared no-first-use doctrines, but Pakistan has not declared nuclear policy retains a first-use policy. This dichotomy requires clarity. Since China and India are reluctant on official trilateral talks, a multilateral track-II would be less objectionable. Many of the suggested forum may be subsumed in this strategic restraint dialogue.

### ***Multilateral Dialogues on Nuclear- Conventional Entanglements***

As analyzed above, the growth of dual-capable missiles accompanied by technological advancement in accuracy and speed of missiles warrants in-depth discussions. Track-II discussions on limits on development and employment are necessary that can be expanded to include Russia and the United States and where possible European countries.

### ***Multilateral or Trilateral Discussions on Formalizing the de-alert Status***

All three have maintained a non-alert and de-mated status of nuclear weapons. While technological leaps and certain developments have created doubts on the de-alerted status. Development of sea-based deterrence, MIRV capabilities and canisterized warheads implies that certain weapons may be on high alert or possibly on launch-on-warning in silos.<sup>12</sup> These clarifications are becoming important. I recommend group of experts to consider prospects of a joint declaration on low-alert and de-mated status.

### ***Multilateral Discussions on Emerging Technologies and Cross-domain Impact***

As eluded above the impact of lethal autonomous weapons (LAWs) and Artificial Intelligence are still uncertain. Both dyads now need to seriously negotiate new CBMs and rules of engagement on the use of lethal drones on LAC and LOC and cross-border applications. It is important that this subject become part of track-II multilateral discussions.

Introduction of hypersonic glide vehicle in the inventory and ballistic missile defenses would directly contribute to strategic instability in both dyads (Kidwai 2021). Seemingly there is no multilateral forum that addresses the morality, legalities and strategic implications of LAWs and AI and their cross-domain impact<sup>13</sup> Track-II discussions may consider imposing limits on hypersonic weapons, developments on cyber, artificial intelligence (AI), robotics, and other autonomous weapons. Some of these technological innovations transforming from private sector to defense and strategic systems requiring human-machine symbioses with profound impact on nuclear deterrence and nuclear command, control and communications (NC3) (Khan 2019).

Cyber-attacks are now becoming a common concern in all nuclear armed states, which includes potential targeting of critical infrastructure. There is absence of any

<sup>12</sup>De-alerted nuclear weapons are understood to be not mated with the delivery platforms. High alert weapons are believed to be ready for launch on orders (Kristensen and Korda 2022).

<sup>13</sup>The scope of the Group of Governmental Experts talks under the 1981 Certain Conventional Weapons Convention under UN Conference on Disarmament in Geneva is limited (Saalman and Topychkanov 2021)..

agreement on non-attack on either conventional or nuclear command systems, which requires discussions to create a multilateral regime on cyber CBMs.

### ***Strategic Risk Reduction Centers***

In the 1990s, China-India and India-Pakistan made separate conventional forces agreements (China-India 1993 and 1996; and India-Pakistan 1991 and 1999) and even exchanged non-papers. While China was and is not ready to engage in nuclear talks with South Asia, India and Pakistan have had implied and informal understanding on a recessed, non-alerted state of nuclear forces. With new capabilities and associated strategic risks there is likelihood of public expectations on new measures between the three.

In the 1998–1999 talks India and Pakistan indicated willingness to institute confidence-building and nuclear risk reduction measures. Under clause 3 of the Lahore Agreement and MOU signed between Prime Ministers of India and Pakistan in February 1999, several commitments were made that included: undertaking national measures to reducing the risks of accidental or unauthorized use of nuclear weapons under respective control; notifying each other immediately in the event of any accidental, unauthorized or unexplained incident; and adopting measures aimed at diminishing the possibility of such actions, or incidents being *misinterpreted* by the other and establish the appropriate *communication*, mechanisms for this purpose.

Given the plethora of past CBMs, agreements and promise to establish risk reductions measures and new proposals emanating from track-I and track-II proposals suggested above, I propose establishing strategic risk-reduction centers (SRRCs) in Beijing, New Delhi and Islamabad that would operate separate as two dyads (Beijing-New Delhi and Islamabad-New Delhi).

### ***The Concept***

SRRCs would be the central nodal point for notifications within each government, whose purpose will be to ensure that all agreed and required notifications are accurately transmitted to the counterpart center(s) across the border. It would have two main purposes. First, to act as a central clearinghouse for providing agreed notifications and CBMs. Second, to provide a means of instant communication to clarify and to each other in the event of a tragic incident or unusual event to prevent *misinterpretations* or unintended signals.

### ***Functions***

The SRRCs would collect national data from the relevant agencies and transmit to the counterpart centers and vice versa. Notifications would be done in an agreed upon format, to minimize confusion and maintain record, data communication and logs of all transmissions and receptions. They would have three main tasks: routine exchange of messages via preformatted and agreed upon templates; clarification using preformatted and agreed upon templates as required; meet on annual or biannual basis to review compliance, consult and ensure efficiency and propose new mechanisms.

### **Pros and Cons**

SRRCs would help mitigate if not prevent crisis prevention in several ways. They could provide a pre-notification process to decrease chances of misperception of benign events. Provide leaders a mechanism for timely clarification and reassurance and stop action-reaction spirals. It would also allow all states to understand the sensitivity of the opposite side. Further, the SRRCs would not be as vulnerable to confusion or disinformation campaigns because they would have situational awareness of other communication channels.

SRRCs are not the panacea for crisis management. They are not designed primarily for crisis management, which will always be the job of the politicians, and diplomats, and to a limited extent military (DGMO hotlines). SRRCs work best in concert with a decision by all sides resolve the tensions and misunderstands and to prevent crisis from occurring.

Over time, successful operations of SRRCs would help facilitate managing dyadic tensions and dampening military and technological competition and possibly prevent a destabilizing arms race. SRRCs will not eliminate the ambiguity necessary for stable deterrence but can reduce it under certain destabilizing circumstances. Creation of bilateral or trilateral institution to review compliance will make CBMs more robust and eventually allow political processes to prioritize developing consensus towards peace and stability and focus on common aspirations.

### **Conclusion**

As sovereign states, China and South Asian states have had similar aspirations and national objectives throughout their post-colonial history. For three quarters differing priorities and visions precluded them to develop consensus for peace and security architecture. India and China are the two largest states in Asia with a healthy record of economic interactions in recent history, yet they are Asian rivals. China and Pakistan formed an entente cordial and are now transforming the emphasis from security to geo-economic paradigm manifested in China-Pakistan Economic corridor (CPEC) which is integral to Chin's Belt Road Initiative (BRI). These shifting alliances and balancing along with advancement in nuclear capabilities and induction of disruptive technologies in crisis prone Southern Asia are now challenging the fragile strategic stability in the two dyads.

The two dyads have had past agreements that could still form basis of consensus on conventional and strategic restraints<sup>14</sup> These include: bringing military presence to a lower limit; agreeing to identify offensive forces and limits to military maneuvers; and exchanging force data; establishing leadership hotlines; and formulating joint working groups (Khan 2021b). Besides asymmetries, now there have been subtle changes and incongruities in the military and nuclear doctrines, force disposition and modernizations, therefore the two dyads need to engage in bilateral or trilateral discussions to obviate misperceptions of intentions and capabilities. China and India pledges of no-first

---

<sup>14</sup>India and China signed an "Agreement on Maintenance of Peace and Tranquility along the Line of Actual Control (LAC)" in September 1993 in Beijing. In 1996, both signed the "Agreement between the Government of the Republic of India and the Government of the People's Republic of China on Confidence-Building Measures in the Military Field Along the Line of Actual Control in the India-China Border Areas," (Peacemaker UN 1996). India and Pakistan had signed 1991 Military CBMs and Lahore Agreement in 1999..

-use have not mitigated threat perceptions of each other. Pakistan's reliance on nuclear deterrence to offset conventional imbalance does not dampen the nuclear competition.

Strategic risks between the two dyads are multiplied due to induction of dual-use accurate missiles systems increasing counterforce capabilities. Combined with drones, cyber operations and race in space domain allow leadership with greater risk manipulation options. These new uncertainties and overlapping risk factors are generating complexities in triangular relations in Southern Asia. It is therefore important that the three nuclear armed states now find a bilateral, trilateral or multilateral platform to engage in strategic risk reductions dialogues. The consequences of accidental wars in this part are likely to affect all major powers that are contributing to the arms race and ensuing instability conditions. There are several measures proposed above for Track-I and Track-II considerations. Besides establishment of strategic risk reduction centers, this paper proposes attempting analogues agreements from the Cold War.

## Disclosure Statement

No potential conflict of interest was reported by the author(s).

## Notes on Contributor

*Feroz Hassan Khan* is a Research Professor in the Department of National Security Affairs of US Naval Postgraduate School. He is a former Brigadier in the Pakistan Army, with experience in combat action and command on active fronts on Kashmir and Afghanistan border. He last served as Director Arms Control and Disarmament Affairs, in the Strategic Plans Division, Joint Services Headquarters. Brigadier Khan holds an M.A. International Relations from the School of Advanced International Studies (SAIS), John Hopkins University, Washington DC. He has held a series of visiting fellowships in the United States at Stanford University, the Woodrow Wilson International Center for Scholars; the Brookings Institution in Washington D.C. and Cooperative Monitoring Center Sandia National Laboratory in Albuquerque, New Mexico. He regularly lectures in various universities and think tanks in United States, Europe and Asia and is member of International Institute for Strategic Studies, London. He has widely participated in international and national conferences on strategic issues and international security. He is the author of *Eating Grass: The Making of the Pakistani Bomb* (Stanford University Press, 2012) and *Subcontinent Adrift: Strategic Futures of South Asia* (Cambria Press, 2022).

## References

- Bergen, P., M. Salyk-Virk, and D. Sterman. 2020. "World of Drones." New America Foundation. <https://www.newamerica.org/international-security/reports/world-drones/>
- Brustlein, C. 2021. "Strategic Risk Reduction between Nuclear-Weapons Possessors", *Proliferation Papers*, No. 63, Ifri, January. <https://www.ifri.org/en/publications/etudes-de-lifri/proliferation-papers/strategic-risk-reduction-between-nuclear-weapons>
- CIA. 2022a. "World Factbook: India." <https://www.cia.gov/the-world-factbook/countries/india/#transnational-issues>
- CIA. 2022b. "World Factbook." <https://www.cia.gov/the-world-factbook/>
- Clary, C. 2022. "The Curious Case of Accidental Indian Missile Launch," *War on the Rocks*. <https://warontherocks.com/2022/03/the-curious-case-of-the-accidental-indian-missile-launch/>

- Crawford, T. 2003. *Pivotal Deterrence: Third Party Statecraft and the Pursuit of Peace*. Ithaca: Cornell University Press.
- Cummings, A. 2020. "High Speed, Low-Yield: A Dual-Use Hypersonic Weapon." *War on the Rocks*. <https://warontherocks.com/2020/09/high-speed-low-yield-a-u-s-dual-use-hypersonic-weapon/>
- Cunningham, F. S., and M. Taylor Fravel. 2015. "Assuring Assured Retaliation: China's Nuclear Posture and U.S.-China Strategic Stability." *International Security* 40 (2): 7–50. doi:10.1162/ISEC\_a\_00215.
- Dittmer, L. 1981. "The Strategic Triangle: An Elementary Game Theoretical Analysis." *World Politics* 33 (4): 485–516.
- Dotson, J. 2020. "The Beidou Satellite Network and the 'Space Silk Road' in Eurasia." *China Brief a Journal of Analysis and Information* 20 (12): 2–7.
- Einhorn, R., and W. P. S. Sidhu. 2017. "The Strategic Chain Linking Pakistan, India, China and the United States," *Arms Control and Non-Proliferation Series Paper 14*, Washington D.C: Foreign Policy at Brookings, The Brookings Institution. [https://www.brookings.edu/wp-content/uploads/2017/03/acnpi\\_201703\\_strategic\\_chain.pdf](https://www.brookings.edu/wp-content/uploads/2017/03/acnpi_201703_strategic_chain.pdf)
- Gopalswamy, B., and H. V. Pant. 2010. "Does India Need Anti-Satellite Capability?" *Rediff*. <https://news.rediff.com/column/2010/feb/09/does-india-need-anti-satellite-capability.htm>
- Hagerty, D. T. 1991. "India's Regional Security Doctrine." *Asian Survey* 31 (4): 351–363.
- Hamling, D. 2020. "India Disputes Claim that China Routed Their Troops with Microwave Blaster," *Forbes*, November 20. <https://www.forbes.com/sites/davidhambling/2020/11/20/disputed-claim-that-china-routed-indian-troops-with-microwave-blaster/?sh=2aebf1e824f6>
- Heginbotham, E., S. C. Micheal, L. H. Jacob, L. Bonny, P. T. Christopher, E. M. Forrest, N. Micheal, L. G. Cristina, and K. B. Samuel. 2017. *China's Evolving Nuclear Deterrent: Major Drivers and Issues for United States*. Santa Monica, CA: RAND Corporation. [www.rand.org/t/RR1628](http://www.rand.org/t/RR1628)
- Hua, F. 2017. "Space Cooperation Expands China's Belt and Road 'Circle of Friends'" *People's Daily*. <http://en.people.cn/n3/2017/0514/c90000-9215306.html>
- IISS. 2021. *The Military Balance 2021*. London, UK: International Institute for Strategic Studies.
- Jervis, R. 1976. *Perception and Misperception in International Politics*. Princeton, NJ: Princeton University Press.
- Jervis, R. 1997. *Systems Effects: Complexity in Social and Political Life*. Princeton, New Jersey: Princeton University Press.
- Khan, F. H. 2012. *Eating Grass: The Making of the Pakistani Bomb*. Palo Alto, CA: Stanford University Press.
- Khan, F. H. 2019. "Nuclear Command, Control, and Communications (NC3): The Case of Pakistan." *Technology for Global Security Special Reports*. <https://www.tech4gs.org/nc3-systems-and-strategic-stability-a-globaloverview.html>
- Khan, F. H. 2021a. "Trilateral Strategic Confidence Building Measures in Southern Asia." *Asia-Pacific Leadership Network*.
- Khan, F. H. 2021b. "Time for a Trialogue: The Need for Restraints Involving India, China and Pakistan." *Global Asia* 16 (2). [https://www.globalasia.org/v16no2/cover/time-for-a-trialogue-the-need-for-restraints-involving-india-china-and-pakistan\\_feroz-hassan-khan/](https://www.globalasia.org/v16no2/cover/time-for-a-trialogue-the-need-for-restraints-involving-india-china-and-pakistan_feroz-hassan-khan/)
- Kidwai, Lt. Gen (retired). 2020. "A Keynote Speech at 7<sup>th</sup>." IISS- CISS South Asian Strategic Stability: Deterrence, Nuclear Weapons and Arms Control Workshop, London. <https://www.iiss.org/events/2020/02/7th-iiss-and-ciss-south-asian-strategic-stability-workshop>
- Kidwai, Lt. Gen (retired). 2021. "A Keynote Address at CISS Conference." STRAFASIA. <https://strafasia.com/keynote-address-by-lt-general-r-khalid-kidwai-at-ciss-conference-8-dec-21/>
- Krishnan, A. 2021. "India's Trade with China Set to Cross \$ 100 Billion in 2021," *The Hindu*. <https://www.thehindu.com/news/national/indias-trade-with-china-set-to-cross-100-billion-in-2021/article36988429.ece>
- Kristensen, H., and M. Korda. 2020. "Chinese Nuclear Forces, 2020." *Bulletin of the Atomic Scientists* 76 (6): 443–457. doi:10.1080/00963402.2020.1846432.

- Kristensen, H., and M. Korda. 2022. "Status of World Nuclear Forces." *Federation of American Scientists*.
- Lavoy, P. 2007. "Pakistan's Nuclear Posture: Security and Survivability." *Nonproliferation Policy Education Center*. [http://www.npolicy.org/article\\_file/Pakistans\\_Nuclear\\_Posture-Security\\_and\\_Survivability.pdf](http://www.npolicy.org/article_file/Pakistans_Nuclear_Posture-Security_and_Survivability.pdf)
- Lei, Z. 2021. "China's Heavenly Palace Welcomes International Cooperation." *China Daily*, Accessed 17 June 2021. <http://global.chinadaily.com.cn/a/202106/17/WS60ca84e9a31024ad0bac98be.html>
- Liu, X. 2020. "China's Hypersonic Cruise Missile Sees Technological Breakthrough: Reports." *Global Times*. <https://www.globaltimes.cn/content/1190877.shtml>
- Makichuk, D. 2020. "Did China Use Microwave Weapons on Indian Soldiers?" *Asia Times*. <https://asiatimes.com/2020/11/did-china-use-microwave-weapons-on-indian-soldiers/>
- Makunth, V. 2019. "Boom or Bust: What Science Tells Us about What Went down in Balakot," *The Wire*. <https://thewire.in/security/boom-or-bust-what-science-tells-us-about-what-went-down-in-balakot>
- Mallory, K. 2018. "New Challenges in Cross-Domain Deterrence," *RAND Corporation*. [https://www.rand.org/content/dam/rand/pubs/perspectives/PE200/PE259/RAND\\_PE259.pdf](https://www.rand.org/content/dam/rand/pubs/perspectives/PE200/PE259/RAND_PE259.pdf)
- Markey, D. S. 2015. "Armed Confrontation between China and India." *Contingency Planning Memorandum 27*. Council on Foreign Relation (CFR). <https://www.cfr.org/report/armed-confrontation-between-china-and-india>
- Ministry of External Affairs (India). 2019. "Frequently Asked Questions on Mission Shakti, India's Anti-Satellite Missile Test Conducted on 27 March, 2019." [https://www.mea.gov.in/press-releases.htm?dtl/31179/Frequently\\_Asked\\_Questions\\_on\\_Mission\\_Shakti\\_Indias\\_AntiSatellite\\_Missile\\_test\\_conducted\\_on\\_27\\_March\\_2019](https://www.mea.gov.in/press-releases.htm?dtl/31179/Frequently_Asked_Questions_on_Mission_Shakti_Indias_AntiSatellite_Missile_test_conducted_on_27_March_2019)
- Moltz, C. 2012. *Asia's Space Race: National Motivations, Regional Rivalries, and International Risks*. New York: Columbia University Press.
- Narang, V. 2014. *Nuclear Strategy in the Modern Era: Regional Powers and International Conflict*. Princeton, NJ: Princeton University Press.
- Noronha, J. 2019. "A Growing Variety of Weaponry - Future Trends in Air Armament." In *SP's Military Yearbook 2019*, edited by Jayant Baranwal. New Delhi: SP Guide Publications.
- O'Donnell, F. 2018. "Stabilizing Sino-Indian Security Relations Managing Strategic Rivalry After Doklam." *Carnegie Endowment Paper*. [https://carnegieendowment.org/files/CP335\\_ODonnell\\_final.pdf](https://carnegieendowment.org/files/CP335_ODonnell_final.pdf)
- O'Donnell, F., and A. Bollfrass. 2020. "The Strategic Postures of China and India: A Visual Guide." *Belfer Center Report*. India Postures.pdf. <https://www.belfercenter.org/sites/default/files/2020-03/india-china-postures/China>
- Office of the Secretary of Defense. 2005. *Unmanned Aircraft Systems Roadmap 2005–2030*. Washington, DC: US Department of Defense. [https://fas.org/irp/program/collect/uav\\_roadmap2005.pdf](https://fas.org/irp/program/collect/uav_roadmap2005.pdf)
- Pandit, R. 2021. "Army Chief Says India Fully Prepared for the Long Haul in Eastern Ladakh with China, Even as Forces Rebalance to LAC", *The Times of India*. <https://timesofindia.indiatimes.com/india/army-chief-says-india-fully-prepared-for-the-long-haul-in-eastern-ladakh-with-china-even-as-forces-rebalance-to-lac/articleshow/80237152.cms>
- Paul, T. V. 2019. "When Balance of Power Meets Globalization: China, India and the Small States of South Asia." *Politics* 39 (1). <https://journals.sagepub.com/doi/10.1177/0263395718779930>
- Roche, E. 2022. "India Capable of Achieving Growth and Compete with China in 20 Years: Report." *Mint*. <https://www.livemint.com/news/india/india-capable-of-achieving-growth-and-compete-with-china-in-20-years-report-11616515656147.html>
- Saalman, L. 2020. "China's Detachment South Asian Nuclear Triangle." *Stockholm International Peace Research Institute (SIPRI)*. <https://www.sipri.org/commentary/blog/2020/chinas-detachment-south-asian-nuclear-triangle>

- Saalman, L., and P. Topychkanov. 2021. "Reinvigorating South Asian Nuclear Transparency and Confidence-Building Measures." *SIPRI Insights on Peace and Security, No 2021/3*. Accessed September 2021.
- Sarma, N. 2019. "Southeast Asian Space Programmes: Capabilities, Challenges and Collaborations." *ORF Special Report No. 82*. New Delhi, India: Observer Research Foundation. <https://www.orfonline.org/research/southeast-asian-space-programmes-capabilities-challenges-collaborations-48799/>
- Schelling, T. 1960. *The Strategy of Conflict*. New York: Oxford University Press.
- Secure World Foundation. 2020. *Global Counterspace Capabilities: An Open Source Assessment*. Washington, DC: Secure World Foundation. <https://swfound.org/counterspace/>
- Segal, G. 1982. *The Great Power Triangle*. New York: St Martin Press.
- Shukla, A. 2021. "Army's Pivot to the North." *Broadsword blog*. <https://www.ajaishukla.com/2021/01/armys-pivot-to-north.html>
- Singh, S. 2021. "The Challenge of Two-Front War: India's China-Pakistan's Dilemma." Stimson Center South Asia Program. <https://www.stimson.org/wp-content/uploads/2021/04/The-Challenge-of-a-Two.pdf>
- SIPRI. 2021. *SIPRI Yearbook 2021*. Stockholm, Sweden: Oxford University Press.
- Suleri, A. Q. 2021. "2021: The State of the Economy." *The News International*. <https://www.thenews.com.pk/print/920932-2021-the-state-of-the-economy>
- Sultan, A. 2021. "Missile Developments in South Asia: A Perspective from Pakistan." In *Missile Dialogue Initiative*. London: International Institute of Strategic Studies. <https://www.iiss.org/blogs/research-paper/2021/05/missile-developments-south-asia>
- Tarapore, A. 2021. "The Crisis after the Crisis: How Ladakh Will Shape India's Competition with China." Lowy Institute. <https://www.lowyinstitute.org/publications/crisis-after-crisis-how-ladakh-will-shape-india-s-competition-china>
- Times of India. 2020. "Post-Galwan Clash, Indian Navy Quietly Deployed Warship in South China Sea." *The Times of India*. <https://timesofindia.indiatimes.com/india/post-galwan-clash-indian-navy-quietly-deployed-warship-in-south-china-sea/articleshow/77834259.cms>
- Woo, S. 2003. "Triangle Research and Understanding Northeast Asian Politics." *Asian Perspective* 27 (2).
- Xinhua, 2018. "China Strengthens International Space Cooperation." State Council of the People's Republic of China. [http://english.www.gov.cn/state\\_council/ministries/2018/04/19/content\\_281476117420730.htm](http://english.www.gov.cn/state_council/ministries/2018/04/19/content_281476117420730.htm)
- Zegart, A. 2020. "Cheap Fights, Credible Threats: The Future of Armed Drones and Coercion." *Journal of Strategic Studies* 43 (1): 6–46. doi:10.1080/01402390.2018.1439747.



## ANNEX A SAMPLE AGREEMENT BETWEEN TWO DYADS

### Preamble

India and Pakistan, hereafter referred to as the Parties,

Guided by the objectives of strengthening Peace and security,

Conscious of the devastating consequences of nuclear war for people of all countries as well as for mankind,

Proceeding from the desire to bring about conditions, in which the danger of an outbreak of nuclear war in the region would be reduced and ultimately eliminated,

HT Proceedings with the obligations under the Charter of the United Nations regarding the maintenance of peace, refraining from the threat or use of force, and avoidance of war, and in conformity with the agreements to which either party has subscribed,

Proceeding from several summit declarations between all parties signed in 1993, 1996, 1999, all parties have agreed as follows:

- Article 1.

The Parties agree that the objective of their policies is to remove the danger of war and military confrontations that could lead to the use of nuclear weapons.

- Article 2

The Parties, accordingly, agree that they will act in a manner as to prevent the development of situations capable of causing dangerous exacerbation of their relations.

- Article 3

The Parties undertake to refrain from the threat or use of force against each other and agree that they will be guided by such considerations in the formulation of their foreign policies and in their actions in their bilateral relations.

- Article 4.

Each Party undertakes to maintain and to improve, as it deems necessary, its existing organizational and technical arrangements to guard against the accidental or unauthorized use of nuclear weapons under its control.

- Article 5

The Parties undertake to notify each other immediately in the event of an accidental, unauthorized or any other unexplained incident involving possible detonation of nuclear weapon, or radioactive fallout, or the possibility of exposure to dangerous chemicals or disease-causing pathogens. In the event each party undertake to make every effort to take necessary measures to minimize the consequences of such an event.

- Article 6

The Parties undertake to notify detection by any warning systems of unidentified objects or in the event of signs of interference with these systems or with related communication facilities.

- Article 7

The Parties undertake to notify the other party in advance of any planned missiles launches and agree that all missile flight tests will not be in each other's direction.

- Article 8

Each Party, in other situations involving unexplained nuclear incidents, undertakes to act in such a manner as to reduce the possibility of its actions being misinterpreted by the other Party.

- Article 9

If at any time relations between the Parties appear to involve the risk of a nuclear conflict, the Parties shall immediately enter into urgent consultations with each other and make every effort to avert this risk.

- Article 10

Each party will be free to inform the Security Council of the United Nations, the Secretary General of the UN and friendly governments of the progress and outcome of consultations initiated.

Nothing in this agreement shall affect or impair:

- (a) The inherent right of individual or collective self-defense as envisioned by Article 51 of the Charter of the United Nations,
- (b) the provisions of the Charter of the United Nations, including those relating to the Maintenance or restoration of international peace and security, and
- (c) the obligations under taken by either Party towards its allies or other countries in treaties, agreements, and other appropriate documents.

The Agreement shall be of unlimited duration.

The Agreement shall enter into Force upon Signature.

\* This article is based on a Working Paper Submitted for APLN-Toda Peace Institute's Collaborative Project "Managing the China-India-Pakistan Nuclear Trilemma".