



U.S.-Pakistani Nuclear Relations

A Strategic Survey

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PASCC
PROJECT ON ADVANCED SYSTEMS AND CONCEPTS
FOR COUNTERING WEAPONS OF MASS DESTRUCTION



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The Naval Postgraduate School Center on Contemporary Conflict is the research wing of the Department of National Security Affairs (NSA) and specializes in the study of international relations, security policy, and regional studies. One of the CCC's programs is the Project on Advanced Systems and Concepts for Countering WMD (PASCC). PASCC operates as a program planning and implementation office, research center, and intellectual clearinghouse for the execution of analysis and future-oriented studies and dialogues for the Defense Threat Reduction Agency.

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ACRONYMS

BMD	Ballistic missile defense
C2	Command and control
CBM	Confidence-building measure
FATA	Federally Administered Tribal Areas
FMCT	Fissile Material Cutoff Treaty
HRP	Human Reliability Program
IAEA	International Atomic Energy Agency
IBG	Integrated battle group
ISR	Intelligence, surveillance, reconnaissance
JeM	Jaish-e-Mohammed
LeT	Lashkar-e-Taiba
MaRV	Maneuverable reentry vehicle
MIRV	Multiple independently targetable reentry vehicle
MLRS	Multiple launch rocket system
NEMS	National Emergency Management System (Pakistan)
NFU	No first use (of nuclear weapons)
NGO	Non-governmental organization
NPT	Nonproliferation Treaty
NRECC	National Radiation Emergency Coordination Centre (Pakistan)
NSAP	Nuclear Security Action Plan (Pakistan)
NSG	Nuclear Suppliers Group
NURESC	Nuclear and Radiological Emergency Support Centre (Pakistan)
PAEC	Pakistan Atomic Energy Commission
PNRA	Pakistan Nuclear Regulatory Agency
PRP	Personnel reliability program
SPD	Strategic Plans Division (Pakistan)
SRBM	Short-range ballistic missile
SRR	Strategic restraint regime
SSBN	Nuclear-powered ballistic missile submarine
TNW	Tactical nuclear weapon
TTX	Table-top exercise
WMD	Weapon of mass destruction

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EXECUTIVE SUMMARY

Forged in the wake of September 11, 2001, the last decade of U.S.-Pakistani partnership has been plagued by tension and setbacks. As U.S. forces commence a drawdown in Afghanistan, the perceived reduced importance of Pakistan to U.S. interests creates an opening for Beijing and Islamabad to deepen their strategic relationship. Meanwhile, Indo-Pakistani tensions remain high, and Pakistan continues to advance its nuclear program to hedge against India's conventional military might. Fissile material production is on the rise, and new delivery systems are being introduced. At the same time, Pakistan continues to struggle with myriad internal security problems including a separatist insurgency, mounting religious extremism, and militancy. Taken together, these trends have triggered U.S.-Pakistani debate in four key subject areas: (1) nuclear proliferation, (2) Indo-Pakistani nuclear stability, (3) the security and safety of Pakistan's nuclear program, and (4) the future of nuclear energy in Pakistan. This report surveys these four issues, drawing from a decade of Track II meetings between U.S. and Pakistani stakeholders, as well as trilateral events involving Indian participants. In doing so, this report provides insight on strategic thought processes in Pakistan and the status and trajectory of its nuclear posture. The authors also identify deficiencies in the Track II process with Pakistan and recommend various solutions to improve the quality and breadth of the discourse.

Although the global nonproliferation regime failed to prevent Pakistan and India from obtaining the bomb, proliferation remains a prominent subject in South Asia. After the 2004 busting of the A.Q. Khan network, Pakistan found itself accused of illicitly exporting sensitive nuclear technologies. Islamabad took steps to rectify matters by dismantling the domestic elements of the network, interrogating Khan, and strengthening national export controls, but the memory of the scandal continues to mar Pakistan's nuclear reputation. Today, however, the more urgent proliferation concern is the rapid expansion of nuclear arsenals in South Asia. Pakistan has introduced six new delivery systems since 2000, and fissile material production is set to increase with a new uranium mine in Khyber Pakhtunkhwa and a fourth plutonium production reactor at the Khushab complex. India, meanwhile, is fielding the Agni-V intermediate-range ballistic missile and the submarine-launched K-15/*Sagarika*. The vertical proliferation contest in South Asia is inflaming Indo-Pakistani tensions and undermining nuclear stability on the subcontinent.

Nuclear stability is the most scrutinized topic in Track II dialogues with Pakistan. India and Pakistan are embroiled in a classic security dilemma, fueled by mutual mistrust rooted in the unresolved Kashmir dispute and aggravated by terrorism. If deterrence fails and a cross-border skirmish escalates into a full-scale war, the potential for a nuclear exchange cannot be ruled out. The subjects of Kashmir and terrorism have been discussed at length in the academic literature on South Asia, but Track II gatherings have explored several

other variables that are undermining the prospects for long-term peace. These variables include doctrinal mismatch, rapid advancements in weapons technology, and bilateral gridlock in confidence-building and arms control measures.

Indian and Pakistani nuclear and military doctrines are at odds. India's nuclear doctrine eschews first use but vows to massively retaliate against any use of WMD against Indian forces, anywhere. In contrast, Pakistan's nuclear doctrine allows for first use but is ambiguous regarding its nuclear redlines. India is nonetheless confident that its massive retaliatory capability and declared intent would deter a Pakistani nuclear strike. By extension, India believes it has enough space to wage a limited war against Pakistan without triggering a nuclear response. This conviction is reflected in India's "proactive" conventional war doctrine, which would entail a swift but shallow ground incursion into Pakistan using division-sized ground formations, commonly referred to as integrated battle groups (IBGs). The goal of such an operation would not be to seize significant territory, but to inflict considerable damage on Pakistani military forces in retaliation for Islamabad's failure to prevent cross-border terrorists from striking India.

In an effort to deter Indian adventurism, Pakistan has introduced a suite of new weapons technologies. Short-range tactical nuclear weapons (TNW) have already been fielded, and sea-based nuclear delivery systems are in the R&D pipeline. Pakistani participants in Track IIs are adamant that TNW would only be used as a last resort in a conflict with India. Western analysts, however, remain unconvinced. They fear Pakistan may deploy and possibly employ TNW early in a conflict as a signal of resolve, boosting the likelihood of a nuclear exchange. As for sea-based systems, Pakistanis maintain they are for second-strike purposes only, would never be utilized in a preemptive manner, and are a necessary riposte to India's ballistic missile defenses.

Regardless of the intentions behind TNW and sea-based deterrents, they raise a plethora of command and control (C2) issues. Pakistanis insist that C2 for these systems is irrevocably centralized in the hands of the civilian-led National Command Authority. Yet centralized C2 delays the launch process, making the systems more vulnerable to Indian preemption in the event of crisis or conflict. Dynamics in the heat of battle could potentially force Pakistan to abandon centralized C2 in favor of predelegated launch authority. While predelegation would maximize the operational responsiveness of the systems, it also opens the door for inadvertent, premature, or unauthorized use. This dilemma is no different than what NATO faced in the early decades of the Cold War.

Another key factor undermining regional nuclear stability includes the tepid diplomatic progress in Indo-Pakistani confidence-building measures (CBMs) and arms control. Both capitals are generally shy of accepting arms control initiatives in the belief that more weapons mean more national security. As an alternative, South Asia has traditionally

embraced CBMs; examples currently on the books include advance warning of ballistic missile flight tests, pre-notification of military exercises, and crisis hotlines between top civilian and military decision-makers. Although many CBMs are in place, most of the low-hanging fruit has already been plucked, and the political will to embark on new, more substantive CBMs is often lacking. In any case, CBMs alone are no panacea for security competition and instability. For sustainable peace to endure in South Asia, a strategic restraint regime – a regional security and arms control architecture – must be crafted.

As the debate on South Asian nuclear stability continues, fissile material production and military spending proceed apace, and new delivery systems are being flight-tested and fielded. In fact, India and Pakistan have flight-tested more delivery systems since 1998 than any other state.¹ A crisis between Islamabad and New Delhi could escalate rapidly to a full-scale war well before the international community is able to step in and defuse the situation. Geographic proximity, compressed mobilization timelines, and military necessity will make it difficult for either side to control the pace of escalation. The subcontinent remains a powder keg.

Although nuclear stability continues to dominate Track II discussions, the subject of nuclear security and safety is gaining traction, borne from persistent fears of WMD terrorism. Pakistanis consistently stress that their nuclear stockpile and facilities are secure, their weapons are one-point safe, their personnel are subject to rigorous background screening, and contingency plans are in place to manage a security breach or nuclear disaster. Pakistanis believe that a robust security and safety regime will remedy the backlash from the A.Q. Khan affair, portray their country as a responsible nuclear steward, and bolster Pakistan's case for formal membership in the Nuclear Suppliers Group (NSG). Of note, a recent report by the Nuclear Threat Initiative cites demonstrable progress in Pakistani nuclear safeguards, and Pakistan has proudly advertised its regulatory and organizational controls in multiple Track I nuclear security summits.²

Pakistan's civilian nuclear energy program is another topic of recent Track II interest. Pakistan intends to generate 8,800 MW of nuclear power by 2030, and new Chinese power plants are under construction in Karachi and Chashma. Although it is unlikely this ambitious target will be met, Pakistanis see nuclear power as an eventual remedy for the country's energy crisis and a vehicle to enhance Pakistan's nuclear legitimacy.

¹ Michael Krepon and Julia Thompson, eds., *Deterrence Stability and Escalation Control in South Asia* (Washington, DC: Stimson Center, 2013), 13.

² *NTI Nuclear Materials Security Index: Building a Framework for Assurance, Accountability, and Action* (Washington, DC: Nuclear Threat Initiative, 2014), 129, <http://ntiindex.org/wp-content/uploads/2014/01/2014-NTI-Index-Report.pdf>.

Track II discussion between U.S. and Pakistani stakeholders is ongoing in the areas of nuclear proliferation, stability, security and safety, and energy. Although Track II workshops provide an outlet for candid debate of U.S.-Pakistani relations and areas of mutual concern, they do have their limitations. Track II findings are slow to influence official policy due to bureaucratic inertia. Furthermore, Track II suffers from redundancy because there are numerous sponsors and performers with no unity of effort. The benefits of Track II, nevertheless, outweigh the drawbacks. Track II “redundancy” generates a bank of expert analysis and provides deeper insight into a country’s strategic culture and threat perceptions. Moreover, Pakistani officials maintain a finger on the pulse of Track II discourse and are therefore continually exposed to fresh policy ideas.

Track II has an important role to play in U.S.-Pakistani relations, and this report proffers recommendations to improve future dialogues. Several topics have a chilling effect on the quality of discourse and should be downplayed in the interest of maintaining a productive meeting, chiefly: (1) allegations that Pakistan is providing safe havens to the Afghan Taliban; (2) the legacy of the A.Q. Khan network; (3) the U.S.-Indian nuclear deal; and (4) drone strikes and associated sovereignty concerns. Meanwhile, some issues have been largely overlooked and deserve newfound attention. Track IIs should begin to explore de-escalation strategies for an Indo-Pakistani conflict, because thus far, discourse has focused exclusively on upward escalation dynamics. Workshops and exercises related to nuclear disaster preparedness, consequence management, and risk-reduction measures would be a novel contribution to the security and safety culture in South Asia. Most importantly, U.S.-Pakistani Track II nuclear dialogues should be expanded. Post-2014, nuclear issues will return to prominence in the bilateral relationship owing to shifting U.S. strategic priorities.

One of the key recommendations of this report is for Washington to identify a potential roadmap for normalizing U.S.-Pakistani nuclear relations. Pakistanis argue they have atoned for the sins of A.Q. Khan, greatly enhanced their nuclear safeguards, and therefore deserve de facto recognition of their nuclear status. They point to the U.S.-Indian nuclear deal as evidence that the United States is “playing favorites” in the region and unfairly discriminating against Pakistan. Although a “U.S.-Pakistani nuclear deal” is not feasible at this juncture, the United States should consider supporting a criteria-based approach for membership in the NSG, providing Islamabad an avenue for eventual accession. Doing so would help bury the vitriol of the A.Q. Khan controversy and the U.S.-Indian nuclear deal. It would move the entire bilateral relationship forward in a constructive manner, coax Pakistan to drop its opposition to the Fissile Material Cutoff Treaty, and potentially induce Pakistan to slow its nuclear buildup, improving strategic stability on the subcontinent.

INTRODUCTION

Since the creation of the independent states of India and Pakistan, South Asia has endured repeated wars and military crises, conflict in Kashmir, and mounting religious extremism. U.S. policy, meanwhile, has struggled to keep pace with the region's volatile and shifting dynamics. From the Cold War to the late 1990s, the United States championed nonproliferation in South Asia in order to limit potential flashpoints for nuclear war. The region had become a hotbed for conventional conflict in the decades since partition, with three Indo-Pakistani wars (1947, 1965, and 1971) and one Sino-Indian war (1962). The introduction of nuclear weapons into this milieu was viewed as dangerous. With India and Pakistan refusing to sign or accede to the Nonproliferation Treaty (NPT), the United States imposed sanctions and helped establish international export control regimes to prevent the subcontinent from obtaining the bomb.

U.S. nonproliferation policy in South Asia proved insufficient, however, when India and Pakistan tested a series of nuclear devices in 1998. Preventing war between the now-nuclear-armed neighbors was now more urgent from a policy standpoint. Accordingly, the United States began to advocate nuclear stability policies to ease regional tensions and dissuade conflict. Washington spearheaded initiatives to limit vertical proliferation, induce strategic restraint, and relax force postures on the subcontinent. The events of 9/11, however, interrupted these efforts and prompted another inflection in U.S. regional policy. The new focus was to defeat global terrorism, the nexus of which was the Afghanistan-Pakistan border region. Practically overnight, Pakistan went from being a target of U.S. sanctions to being a critical partner in the War on Terrorism.³

Increasingly wary of the potential for nuclear-armed terrorism, the United States began to emphasize nuclear security in Pakistan to prevent al-Qaeda and other radical extremists from acquiring radiological or fissile materials. Nuclear safety, meanwhile, became a key action item in the wake of the 2011 Fukushima disaster. Today, the security and safety of Pakistan's nuclear assets remain of paramount concern in Washington, owing to Pakistan's continued struggles with domestic militancy. As Pakistan constructs new reactors and expands its civilian nuclear energy program, effective security and safety protocols are as important as ever.

The complex nuclear trajectories of South Asia, combined with the events of September 11, 2001, have made regional expertise a critical commodity in Washington. After 9/11, many think tanks, universities, and U.S. government agencies began to fund unofficial meetings between native South Asian experts and U.S. participants to discuss political and military

³ For Islamabad, this was *déjà vu*. In 1979, the Soviet invasion of Afghanistan compelled the United States to lift its sanctions on Pakistan and replace them with military and economic aid.

issues in a frank, friendly, and unofficial setting. These informal engagements, known as Track II diplomacy, were intended to develop and debate innovative solutions to challenging security issues.

The Center on Contemporary Conflict (CCC) at the U.S. Naval Postgraduate School was established in 2001 to mitigate the dearth of functional subject-matter expertise in regional studies, to include South Asia. The CCC has organized numerous Track II dialogues in the belief that consultations with regional experts would help inform U.S. foreign policy. Experts consulted since 2001 have included academics, retired military officials, and former policymakers who maintain links with their respective establishments and could potentially influence their thinking. The CCC's Track II efforts pertaining to South Asia have focused on the concept of "strategic stability" – a term which encompasses a range of issues, including nuclear proliferation, deterrence stability, and role of non-state actors in triggering crises in the region.⁴

This report interprets the past decade of U.S.-Pakistani nuclear relations through an overarching analysis of previous Track II dialogues with U.S., Pakistani, and Indian stakeholders. It provides U.S. government agencies and research organizations with insight on the strategic thought process in Pakistan as well as the status and trajectories of its nuclear program. Importantly, this assessment also informs the agendas and areas of focus for future Track II dialogues by identifying discussion gaps and redundancies.

This report is divided into three sections. This introductory section provides background on Pakistan's tumultuous relationship with the United States from 1998 onwards. It also discusses the concept of Track II diplomacy, explaining its strengths and limitations, as well as best practices. The second section provides a comprehensive survey of the issues surrounding Pakistan's nuclear program, as commonly raised on the Track II circuit. Four subjects are examined in detail: nuclear proliferation, nuclear stability, nuclear security and safety, and nuclear energy. The third and final section of this report charts a way forward for U.S.-Pakistani nuclear relations and recommends changes to improve the Track II process with Pakistan.

⁴ The CCC is not the only performer that convenes Track II meetings between Americans and Pakistanis. Other performers with whom the authors of this report have interacted include the Hoover Institution and Center on International Security and Cooperation at Stanford University, the Carnegie Endowment for International Peace, the Henry L. Stimson Center, the University of Ottawa, and the Center for Global Security Research at Lawrence Livermore National Laboratory.

Overview of U.S.-Pakistani Relations

One of the key purposes of engaging Pakistani security experts in the Track II process has been to gain a better understanding of South Asia's strategic dynamics in an era when the region has been central to U.S. security policy. After September 11, 2001, the Afghanistan-Pakistan borderlands became the epicenter of the War on Terrorism. Strategic cooperation with Pakistan was deemed indispensable to the war effort and was expanded. But over time, several irritants chilled the bilateral relationship, including the A.Q. Khan proliferation scandal, the U.S.-Indian nuclear deal, questions over Pakistan's commitment to the War on Terrorism, and sovereignty concerns stemming from drone strikes. Today, the relationship between Washington and Islamabad remains functional, but as the United States rebalances to the Asia-Pacific and deepens its partnership with India, Pakistanis fear they are increasingly peripheral to U.S. interests. In reality, Pakistan's geopolitical relevance in the coming decades is unlikely to diminish due to its proximity to Afghanistan and Iran, rivalry with India, and friendship with China. Furthermore, the United States has enduring interests in nuclear nonproliferation and stability in South Asia, as well as the security and safety of Pakistan's military and civilian nuclear programs.

"Pakistan's geopolitical relevance in the coming decades is unlikely to diminish due to its proximity to Afghanistan and Iran, rivalry with India, and friendship with China."

The past 15 years have been an acutely volatile time for Pakistan. The 1998 nuclear tests incurred a round of economically damaging sanctions from Washington. Sanctions were lifted in early 2001, but Pakistan then became embroiled in the geopolitical maelstrom of 9/11. After Operation Enduring Freedom was launched in October 2001, Al-Qaeda and Taliban militants fled to Pakistan's western borderlands and spread deep inside the country. India, meanwhile, continued to augment its conventional military superiority over Pakistan, and several crises brought the pair to the brink of war. In 2001, Pakistan-based extremists attacked the Indian parliament building in New Delhi, raising military tensions and prompting a 10-month standoff along the international border. Another crisis occurred after the 2008 terror attack in Mumbai, again linked to Pakistan-based militants. Internal political harmony has also proven elusive for Pakistan throughout this period, as demonstrated by the 2007 Lawyers' Movement, the formation of the Tehrik-i-Taliban Pakistan, suicide terrorism, and the secessionist movement in Baluchistan. In sum, Pakistan is beset by security problems from all sides and within.

As Pakistan coped with mounting internal and external threats, several irritants began to plague the U.S.-Pakistani bilateral relationship. In the fall of 2004, the A.Q. Khan proliferation network was busted, and Pakistan found itself in the proverbial doghouse of global public opinion. As a result, the nuclear narrative in South Asia began to transform.

The original narrative, after the 1998 nuclear tests, was that both India and Pakistan had defied the international nonproliferation regime.⁵ The post-A.Q. Khan narrative, however, recast India as a responsible nuclear state and Pakistan as a renegade proliferator. The United States proceeded almost immediately to forge an unprecedented nuclear relationship with New Delhi by offering a civilian nuclear cooperation deal in 2005.

"The U.S.-Indian nuclear deal became a major sticking point in U.S.-Pakistan relations and remains so to this day. From a Pakistani standpoint, the deal is discriminatory and exhibits a double standard."

Approved by Congress in 2008, the deal allows India to import nuclear fuel and technology despite being a non-signatory to the NPT.

The U.S.-Indian nuclear deal became a major sticking point in U.S.-Pakistani relations and remains so to this day. From a Pakistani standpoint, the deal is discriminatory and exhibits a double standard. Pakistanis feel that their quest for nuclear deterrence was no different than India's, thus they qualify for a nuclear deal of their own. Western analysts counter that the A.Q. Khan network has tarnished Pakistan's nonproliferation credibility, but Pakistanis reject this. They maintain that the

Pakistani state was not complicit in A.Q. Khan's network and should not be held liable, especially since Islamabad shared the results of their investigation of Khan with the international community and took steps to prevent the network from recurring. Pakistanis also cite the subsequent improvements they have made to their nuclear security, safety, and export control architecture – improvements that have been publicly lauded by Washington and NGOs such as the Nuclear Threat Initiative.⁶

U.S.-Pakistani relations truly began to sour in 2006-8 as violence in Afghanistan escalated. The Afghan Taliban had successfully regrouped, and Washington grew increasingly dissatisfied with Pakistan's cooperation in the War on Terrorism. The common Western perception was that Pakistan was not "doing enough" to combat militancy in the borderlands, given Islamabad's reluctance to target Afghan Taliban safe havens in the Federally Administered Tribal Areas (FATA). U.S. officials alleged that Pakistan aimed to maintain good relations with Afghan militant groups, such as the Haqqani network, in order to exert indirect influence over the future direction of the Afghan state.⁷

⁵ On June 6, 1998, the UN Security Council unanimously adopted resolution 1172, condemning India and Pakistan in equal terms for their nuclear tests and urging them to halt their nuclear weapons programs. See United Nations Security Council, "Security Council Condemns Nuclear Tests by India and Pakistan," news release, June 6, 1998, <http://www.un.org/News/Press/docs/1998/sc6528.doc.htm>.

⁶ *NTI Nuclear Materials Security Index*, 129.

⁷ *U.S. Strategy in Afghanistan and Iraq: Hearings Before the Senate Armed Services Committee*, 112th Cong., 1st Sess. (2011) (statement of Admiral Michael Mullen), 11, <http://www.armed-services.senate.gov/imo/media/doc/11-70%20-%209-22-11.pdf>.

Pakistan countered that its security forces were being pulled in three contradictory and taxing directions – counterinsurgency in the west, defensive deployment toward India in the east, and counterterrorism in every province. Pakistanis also cited the numerous and mounting casualties suffered by their counterinsurgency forces as proof of their commitment to the War on Terrorism. As mutual resentment grew between the United States and Pakistan, the bilateral relationship turned into a blame game. The U.S. strategic community frequently accused the Pakistani military and intelligence apparatus of double-dealing with religious extremists, while Pakistanis decried the United States’ strategic favoritism toward India.

With both ideological camps firmly entrenched, the United States began to take unilateral action. It stalled coalition support funds to Pakistan; U.S. intelligence contractors (e.g., Raymond Davis) started operating independently within Pakistan without prior coordination with Pakistani officials; and drone strikes were stepped up in Pakistani tribal areas under the aegis of “Counterterrorism-Plus.” These actions inflamed public uproar in Pakistan and raised a plethora of sovereignty concerns.

Relations took a nosedive in May 2011 after the unilateral U.S. military operation that killed Osama bin Laden in Abbottabad. The low-water mark of U.S.-Pakistani relations occurred six months later, when NATO forces mistakenly attacked a Pakistani checkpoint at the Salala ridge on the Pakistan-Afghanistan border, killing 24 Pakistani soldiers.

To a large extent, the past two years have helped repair the U.S.-Pakistani relationship. The year 2013 was a good one in that it was crisis-free. Pakistan underwent a successful democratic transition, relations with India thawed somewhat as bilateral trade expanded, and the official U.S.-Pakistani strategic dialogue resumed after a three-year hiatus.⁸ Although drone strikes continue and many prominent Pakistani politicians remain vehemently opposed, the frequency of drone strikes appears to have decreased in the past year.⁹

Moving forward, however, Washington’s shifting strategic priorities have imbued the U.S.-Pakistani relationship with uncertainty. Islamabad relies heavily on U.S. aid and fears that the rebalance to the Asia-Pacific, drawdown from Afghanistan, and Washington’s diplomatic overtures to New Delhi are signs that Pakistan may soon be “abandoned.”

“Islamabad relies heavily on U.S. aid and fears that the rebalance to the Asia-Pacific, drawdown from Afghanistan, and Washington’s diplomatic overtures to New Delhi are signs that Pakistan may soon be ‘abandoned.’”

⁸ U.S. Department of State, “U.S.-Pakistan Strategic Dialogue,” <http://www.state.gov/p/sca/ci/pk/strategicdialogue/index.htm>.

⁹ Lisa Schlein, “US Drone Strikes, Civilian Casualties Drop in Pakistan Last Year,” Voice of America, last modified March 12, 2014, <http://www.voanews.com/content/us-drone-strikes-civilian-casualties-drop-in-pakistan-last-year/1870012.html>.

Islamabad's fears of abandonment are also a consequence of its complex regional threat environment. Afghanistan is a volatile nest of instability, and the post-2014 outlook is highly uncertain. Meanwhile, Islamabad's relationship with Tehran is lukewarm at best, and India's military dominance continues to pose a threat. India's nuclear ballistic missile submarine *Arihant* has reached operational status, aging tanks are being replaced with new T-90S, 126 Dassault *Rafale* fighters are on order, and new cruise and ballistic missiles are in development. India also claims to be developing ballistic missile point defense over New Delhi and Mumbai. To hedge against these dangers, Pakistan has deepened its cooperation with China, which is providing assistance in nuclear power, infrastructure, and military R&D. Pakistan has also doubled-down on its military nuclear program and embraced tactical nuclear weapons, evident from its recent flight tests of the 60 km-range Hatf-9/*Nasr*.

Despite Pakistani fears of abandonment, Pakistan will remain strategically relevant to the United States for the foreseeable future due to the pervasive nuclear risk in South Asia. The Indo-Pakistani rivalry remains unresolved, arsenals are expanding rapidly, and Pakistan continues to grapple with rising domestic extremism. Strategic relevance, however, does not automatically equate to strong bilateral relations. Balance-of-power calculations are driving a wedge between Washington and Islamabad as the U.S. rebalances to the Asia-Pacific. Two power dyads seem to be emerging: China and Pakistan on the one hand, and India and the United States on the other. Yet Pakistan's convergence with Beijing is not a replacement for its relationship with Washington. For political, economic, and strategic succor, Pakistan remains dependent on the United States. For this reason, Pakistan will be forced to make tough choices regarding its policy with its four regional neighbors – China, India, Afghanistan, and Iran – and calibrate its security and economic policies to retain a functional rapport with Washington.

If the U.S.-Pakistani bilateral relationship is to advance beyond mere functionality, however, both sides must overcome their persistent dissension over nuclear issues. The United States remains skeptical of Islamabad's role in the A.Q. Khan network and is unwilling to grant a Pakistan a nuclear deal on par with India. Pakistan, meanwhile, denies complicity in the A.Q. Khan network and argues it has proven itself as a responsible nuclear power. Pakistanis contend that Washington's reluctance to normalize its nuclear relationship with Pakistan is tantamount to discrimination. The consequences of this diplomatic impasse are not just rhetorical. Pakistan has blocked the Fissile Material Cutoff Treaty and is amplifying its fissile material production capacity with the Shanawa uranium mine in Khyber Pakhtunkhwa province and a fourth plutonium production reactor at the Khushab nuclear complex. Until a diplomatic breakthrough occurs, nuclear competition will proceed unabated on the subcontinent.

Overview of Track II Diplomacy

Track II diplomacy is defined as “a mechanism to bring together people from different sides of a conflict to talk about issues and try to develop new ideas,” typically in the framework of an academic conference or workshop.¹⁰ In the Pakistan context, Track II typically convenes recently-retired U.S. and Pakistani government officials (civilian and military) and some academics to discuss timely subjects of mutual interest, such as Indo-Pakistani nuclear stability. Trilateral meetings involving Indian stakeholders are also common. Oftentimes, an after-action report is published that summarizes and analyzes the discussions for public consumption.

Track II meetings are inherently unofficial and therefore stand in contrast to Track I. The latter involves official diplomatic meetings between state delegations or representatives. During official meetings, dignitaries are constrained by their respective governments’ official positions on matters. Entrenched viewpoints therefore tend to dominate the discourse, while innovative problem-solving and outside-the-box thinking proceed at a glacial pace. This dynamic often puts U.S. and Pakistani diplomats at loggerheads, promoting the status quo.

“Track II is meant to circumvent the ‘red tape of conventional diplomacy’ and generate innovative policy solutions to international disputes and security issues.”

Track II is meant to circumvent the “red tape of conventional diplomacy” and generate innovative policy solutions to international disputes and security issues.¹¹ The hope is that these policy ideas subsequently filter back to the governments and break the Track I gridlock. If this is to occur, the ideas must be credible, well-reasoned, and come from trusted voices. Participant selection is therefore critical to the success of a Track II event. When selecting participants for a Track II workshop, it is generally desirable to invite former (retired) government officials with considerable experience. Retired senior officials are no longer beholden to establishment rigidity, dogma, and groupthink dynamics, yet are credible, respected, and

remain “close to the official agenda.”¹² The location of Track II meetings also influences the quality of the discussions. Holding a dialogue in-country maximizes local participation, but the contributors are more likely to be guarded in their opinions and resort to populism and national rhetoric. In contrast, meeting in a neutral, non-government location abroad promotes candor and allows contentious issues to be discussed more freely. Many Track

¹⁰ Peter Jones, “Track-two Diplomacy,” *Dawn* (Pakistan), February 10, 2013, <http://www.dawn.com/news/785059/track-two-diplomacy>.

¹¹ *Ibid.*

¹² *Ibid.*

IIs with Pakistan have selected overseas venues owing also to the country's security situation.¹³

It is important to emphasize – especially for South Asian Track IIs – that these discussions do not produce a monumental transformation in official diplomatic postures overnight. Track II is meant to be a sustained endeavor as opposed to a one-and-done symposium. Over a span of time and multiple Track II meetings, a nascent policy idea begins to develop and matures gradually, gaining legitimacy as it is deliberated and refined. With the passage of time, these ideas permeate the national strategic discourse and may even obtain buy-in from establishment elites. Even when government policymakers fail to embrace Track II policy recommendations, Track II meetings remain a highly useful tool because they yield valuable insight into a country's strategic thinking and domestic political nuances.¹⁴ Track II also forges lasting people-to-people contacts. Participants are able to network and continue debating and developing ideas with one another long after the meeting is adjourned. In this way, Track II serves as a sort of informal public diplomacy.

Track II suffers from limitations, as well. Despite the strictly unofficial nature of Track II, retired government officials are often reluctant to buck the establishment narrative out of fear of reprisal or political marginalization. Although the Chatham House rule of comment non-attribution does protect participants from this sort of reprisal, it is only effective if the participants actually abide by it. Another drawback of Track II is that serving bureaucrats are often unwilling to “cede ground to non-officials” by adopting Track II policy recommendations¹⁵; alternatively, serving bureaucrats may seek to influence the discourse of a workshop by coaching invitees to parrot the official narrative. In this way, Track II occasionally becomes a battleground for a narrative war. The narrative war phenomenon has affected U.S.-Pakistani Track II dialogues in the past, as well as India-Pakistan dialogues. Participants may feel pressured to present a unified message on their respective country's nuclear program and deterrence philosophy, which can deadlock the discourse. It becomes incumbent upon the dialogue organizer to put the participants back on track and steer the debate to meet the objectives of the event. As mentioned above, it is crucial to hold the meeting in a neutral location overseas because it allows the participants to escape the “gravitational pull” of their respective establishments.

¹³ The last in-country Track II dialogue organized by the CCC was in 2007, in partnership with Pakistan's National Defence University. Since then, the security situation has not permitted a subsequent in-country event. In recent years, the Carnegie Endowment for International Peace and the Henry L. Stimson Center has convened some Track IIs in Islamabad.

¹⁴ Although a country's strategic thinking may appear as a black box to an outside observer, one way to determine the impact of Track II dialogues on a country's national strategic discourse is to engage with local think tanks through interviews and briefings, as appropriate. For Pakistan, key think tanks with which the authors have interacted include the Centre for International Strategic Studies, Institute of Strategic Studies Islamabad, and the Department of Defence and Strategic Studies at Quaid-e-Azam University.

¹⁵ Peter Jones, presentation at Jinnah Institute roundtable, “Interrupted & Interruptible: Does Track II Work in the Indo-Pakistan Dialogue Process?” (Islamabad, Pakistan, December 10, 2014).

One final drawback of Track II is redundancy. Because there is no centralized Track II coordinating body, overlapping Track II efforts are frequently held by a multitude of sponsors. Unity of effort is elusive, if not impossible. Yet this “bug” can easily be construed as a feature of Track II. If Track II meetings help to grease the wheels of official diplomacy, overabundance may be preferable to scarcity.

There are numerous models – or methodologies – for developing a Track II event. A frequent model is the traditional academic conference with commissioned papers from the participants. Another model is the more informal workshop in which the performer develops and distributes a concept paper to the participants that presents them with various discussion prompts. Table-top exercises (e.g., war-games) are a more interactive participation model, but they are more apt for exploring crisis response and management dynamics (e.g., how might Pakistan react to a limited Indian military operation across the Line of Control in Kashmir) as opposed to political and economic issues (e.g., how can economic development allay extremism in Pakistan?).

“If Track II meetings help to grease the wheels of official diplomacy, overabundance may be preferable to scarcity.”

Participant selection is a key methodological component of a Track II event because the participant makeup can influence the quality of the findings and feasibility of any policy recommendations. As mentioned above, newly-retired government officials have the most up-to-date information and the most influence over their respective governments, but invariably, they are reluctant to be candid owing to their inexperience at the Track II level. Although veteran Track II participants have been out of the establishment loop for a longer period and may no longer be “linked-in” with their respective policymaking community, these participants are more likely to give frank and innovative viewpoints. Participant selection is therefore a nuanced tradeoff.

It is usually best to strike a balanced mix between new and veteran participants. New participants are rotational and intermittent, whereas veteran participants comprise a “core group” that is frequently invited to attend Track II meetings. The advantage of this binary formulation is that the freshman participants contribute novel ideas, and over the course of subsequent Track II meetings, the most promising of these ideas gain traction and continue to be deliberated and developed by the veteran participants. Veteran participants therefore comprise an important institutional memory that spans across multiple Track II dialogues in multiple venues.

Although Track II is innately unofficial, it is often appropriate and helpful to invite current government officials to Track II events as observers. In the past, many U.S.-Pakistani Track IIs have hosted officials from the Strategic Plans Division – the entity responsible for the

security, maintenance, force planning, and operational control of Pakistan's nuclear weapons. Track II meetings that include some form of government participation are informally distinguished as "Track 1.5." The upside of having official observers is that they are exposed to a wide spectrum of expert analysis, which helps diffuse policy recommendations from Track II to Track I. Officials are also able to chime in and correct any misconceptions about establishment policy that emerge during the discussions. The downside of official attendance is that it can inhibit the candor and open expression of unconventional viewpoints.¹⁶

Timing can also impact the quality of the Track II event. If a talk is held in the aftermath of a crisis or during acute tensions, tempers may run high and participants may be unwilling to buck the establishment line. U.S.-Pakistani Track II dialogues held in 2011, for instance, were notably tense as a result of a series of incidents, including the Osama bin Laden raid and the friendly-fire incident in Salala.

Track II meetings are typically the most successful when they are narrowly scoped as opposed to addressing a broad subject. Meetings related to the strategic implications of new weapons systems and doctrines, for example, are much more focused and facilitate fruitful professional and technical discussions, as opposed to generalized topics where emotions and politics tend to run high. Narrowly scoped meetings have proven highly successful, yielding insightful discourse on strategic and operational matters among experts.

A number of entities are executing Track II research endeavors on South Asia. Performers include the Center on Contemporary Conflict at the U.S. Naval Postgraduate School, the University of Ottawa, the Hoover Institution and Center for International Security and Cooperation at Stanford University, the Henry L. Stimson Center, the Carnegie Endowment for International Peace, and the Center for Global Security Research at Lawrence Livermore National Laboratory. This report draws its conclusions from over a decade of Track II initiatives executed by the abovementioned performers. In cases where the authors of this report were not they themselves the organizers, they were participants and/or received formal or informal after-action reports.

¹⁶ Since 2011, the Strategic Plans Division (SPD) has generally declined to send observers to Track II events. The precise reasons are unknown, but potential factors include the 2011 nosedive in U.S.-Pakistan relations and a growing organizational skepticism in Pakistan that Track II has become a venue for criticizing Pakistan and its nuclear program. Controversial publications by U.S.-based journalists (for example, Marc Ambinder and Jeffrey Goldberg's "The Ally from Hell," published in *The Atlantic* in October 2011) also fueled negative perceptions in Pakistan.

NUCLEAR ISSUE AREAS

For the past 40 years, nuclear issues have been a consistent thread in U.S.-Pakistani relations. Throughout this period, U.S. policy has shifted gears to keep pace with South Asia's dynamic nuclear environment. From the early 1970s to the 1998 nuclear tests, the United States was primarily concerned with nuclear nonproliferation, including enforcement of the NPT. After Pakistan's and India's 1998 nuclear tests, the United States focused its efforts toward ensuring stability and strategic restraint in South Asia – in other words, preventing the outbreak of nuclear war. Post-9/11, the specter of terrorism and extremism in Pakistan prompted the United States to focus on nuclear security and safety, which continues to this day, especially as Pakistan seeks to expand its nuclear energy infrastructure. The following sections draw from a decade of Track II discourse to survey the current state of affairs in Pakistan for each of these four nuclear policy issue areas – proliferation, stability, security and safety, and energy.

Nuclear Proliferation

In 1974, India tested a nuclear device in an operation code-named “Smiling Buddha.” Given Pakistan's history of tensions and war with its eastern neighbor, this seminal event compelled Islamabad to begin its own nuclear weapons program. Over the next 25 years, the United States applied several policy tools, including sanctions, in order to dissuade Pakistan from developing the bomb. These efforts ultimately proved unsuccessful in 1998 when Pakistan (and India) conducted test explosions, heralding the start of the overt nuclear era in South Asia.

Today, proliferation remains a U.S. policy concern in South Asia despite the failure to prevent the spread of nuclear weapons to the region, and proliferation issues are frequently raised in Track II meetings with the Pakistanis. Pakistan continues to suffer reproach as a horizontal proliferator given the legacy of the A.Q. Khan network. There is also widespread concern over vertical proliferation in Pakistan, given the increase in fissile material output and the rapid induction of new delivery systems. While Pakistan has somewhat mitigated horizontal proliferation concerns by emulating the export control practices of the Nuclear Suppliers Group, Missile Technology Control Regime, and Australia Group, curtailing vertical proliferation has remained a challenge, and Pakistan remains opposed to the Fissile Material Cutoff Treaty.

Pakistanis, however, chafe at U.S. nonproliferation scrutiny. They argue that the United States lost its nonproliferation credibility by extending the 2005 nuclear deal to New Delhi and failing to engage Islamabad, a fellow NPT non-signatory, on equitable terms. Pakistanis also accuse the United States of nuclear duplicity; whereas Pakistan's nuclear

weapons program is viewed with alarm in Washington, India's new intermediate-range nuclear forces (Agni-V and K-series missiles) are tacitly condoned. In short, Pakistanis interpret U.S. conduct as a form of nuclear "discrimination." Western commentators reason that the shadow of the A.Q. Khan affair has spoiled the prospects for a U.S.-Pakistani deal, but Pakistanis contend that the government should not be held responsible because it was not complicit in Khan's network and made a genuine effort to investigate him after he was caught.

Horizontal Proliferation

Horizontal proliferation refers to the spread of nuclear weapons or technologies to states that previously did not have them. This has been an enduring concern of the United States since the dawn of the nuclear age. Starting in the early 1950s, the United States sought to control proliferation on its own terms through the Atoms for Peace initiative, but India's 1974 nuclear test changed Washington's idyllic approach and aggravated Pakistani anxieties. Pakistan saw that India did not suffer major repercussions for its nuclear gambit and decided to follow suit by developing its own nuclear program. In 1976, Pakistan commenced a uranium enrichment program under the direction of Dutch-trained metallurgist Abdul Qadeer (A.Q.) Khan. Khan began to procure centrifuge components from the suppliers of the nuclear fuel company URENCO, and over time, he established a proliferation syndicate of international businessmen involved in dual-use technologies. As Pakistan's nuclear program matured, Khan began to export nuclear components abroad. The syndicate was eventually busted in 2004 after having proliferated nuclear technologies to Libya, North Korea, and Iran. Although a decade has passed since the network's unraveling, the legacy of A.Q. Khan continues to cast a shadow on Pakistan's proliferation reputation.

Before the exposure of the A.Q. Khan network in 2004, relations between Pakistan and the United States were on the upswing. Pakistan had become an important strategic partner of the United States – practically overnight after the 9/11 attacks and the initiation of the War on Terrorism. After the proliferation syndicate came to light, Pakistan took significant steps to limit the damage it would inflict on the bilateral relationship. Pakistan dismantled the domestic component of the international syndicate, shared interrogation findings from A.Q. Khan and his accomplices with the international community, and resolutely denied official complicity in Khan's illicit dealings. As Pakistan sought to control the diplomatic fallout, Khan was hailed as a national hero in Pakistan. President Pervez Musharraf was therefore unable to prosecute Khan and instead elicited a public confession before pardoning him. In this manner, Musharraf sought to temper the international outcry while avoiding a domestic backlash.

Publicly, the U.S. reaction to the A.Q. Khan network was relatively muted. Given Pakistan's status as a strategic anchor in a volatile region, it was more valuable for Washington to maintain a positive rapport than to allow the scandal to spoil the relationship. In essence, the expediency of immediate national security and the War on Terrorism overshadowed nonproliferation ideals. Imagine, however, if the A.Q. Khan revelations had broken in 2011, when U.S.-Pakistani relations were at a low point. It is unlikely that the United States would have been as willing to downplay the scandal, and there would certainly have been intense pressure from Congress for punitive measures. Counterfactuals aside, Washington agreed to put the A.Q. Khan debacle on the back burner but has not forgotten.

Today, Pakistanis on the Track II circuit resent the long shadow of the A.Q. Khan affair. They contend that the proliferation network was a consortium of international businessmen over which A.Q. Khan lacked unitary control. They continue to stress that the Pakistani state was not complicit in the proliferation ring and highlight Pakistan's efforts to investigate A.Q. Khan as proof of sincerity. American analysts remain skeptical, however, citing Pakistan's refusal to submit Khan to external interrogators. In any case, the A.Q. Khan controversy has been endlessly debated and fully exhausted. Americans and Pakistanis do not see eye-to-eye on this topic, and when it is raised on the Track II level, it poisons the discourse.

"Given Pakistan's status as a strategic anchor in a volatile region, it was more valuable for Washington to maintain a positive rapport than to allow the [A.Q. Khan] scandal to spoil the relationship."

Another horizontal proliferation topic that is occasionally raised in Track IIs is the prospect of Pakistani-Saudi nuclear cooperation or extended deterrence if Iran obtains the bomb. While such talk makes for a sensational media headline, it is highly speculative with no concrete basis. As Mark Fitzpatrick points out, "...the strategic, economic, and diplomatic disincentives... make a nuclear transfer unlikely."¹⁷ Pakistan is certainly reluctant to make another mistake similar to the A.Q. Khan affair, and as far as external threats are concerned, Pakistani security managers remain fixated on India. Still, the strategic dynamics in the Persian Gulf are fluid, and with the prospect of a U.S.-Iranian rapprochement, regional security calculations may evolve in the coming years.

Vertical Proliferation

Nuclear arsenals in South Asia are growing rapidly despite the fact that India and Pakistan publicly subscribe to the principle of credible minimum deterrence. Since 2000, Pakistan alone has fielded six new nuclear-capable missiles, including the Hatf-3/*Ghaznavi*, Hatf-7/*Babur*, and Hatf-8/*Ra'ad*. The latest is the Hatf-9/*Nasr* SRBM, a system designed to

¹⁷ Mark Fitzpatrick, *Overcoming Pakistan's Nuclear Dangers* (London: Routledge, 2014), 158.

deliver tactical nuclear weapons to battlefield targets. More systems are believed to be in the development pipeline, including a nuclear-capable submarine-launched cruise missile. Fissile material production is also on the rise. Advanced P-3 and P-4 gas centrifuges are online at Khan Research Laboratories, a new uranium mine is set to open at the Karak district of Khyber Pakhtunkhwa province later this decade, and a fourth plutonium production reactor is nearing completion at the Khushab nuclear complex.¹⁸ Open-source estimates place the current fissile stockpile at 3 ± 1.2 metric tons of highly-enriched uranium and 0.15 ± 0.05 metric tons of plutonium, with approximately 90-110 nuclear weapons in storage. When Khushab-IV comes online, annual plutonium production is expected to reach 25-50 kg.¹⁹

Pakistanis in Track II fora cite three primary drivers for Pakistan's arsenal expansion and why credible minimum deterrence is such a moving target. The first driver was the 2001-2 military standoff with India. The crisis was ignited when Pakistan-based extremists attacked the Indian parliament building in New Delhi, prompting India to mobilize its army to the international border. Although war was averted, Pakistani security managers were reminded of the existential threat posed by their eastern neighbor. Prior to the standoff, Pakistani force goals were relatively modest because it was believed that Pakistan's arsenal was sufficient to deter Indian attack. India's mobilization, however, made Pakistan question the adequacy of its nuclear numbers. Force goals were consequently revised upward, and R&D was fast-tracked to field new systems more rapidly. In essence, the 2001-2 crises compelled Pakistan to redouble its efforts in nuclear deterrence.

The second driver came in 2004, when India divulged its new military doctrine, "Cold Start." Cold Start envisions fighting and winning a limited conventional war with Pakistan without provoking nuclear retaliation. It is believed that Pakistan interpreted Cold Start as a challenge to its deterrent credibility and subsequently began to miniaturize warheads for low-yield, tactical use. In April 2011, Pakistan conducted a successful flight test of a 60 km-range ballistic missile dubbed "*Nasr*." According to the Inter-Services Public Relations press release on the flight test, *Nasr* "carries nuclear warheads of appropriate yield with high accuracy, shoot and scoot attributes. This quick response system addresses the need to deter evolving threats."²⁰ This statement, in conjunction with subsequent flight tests in 2012 and 2013, suggest that Pakistan has accomplished the difficult engineering feat of warhead miniaturization.

¹⁸ International Panel on Fissile Materials, *Global Fissile Material Report 2010: Balancing the Books: Production and Stocks* (2010), 127, <http://fissilematerials.org/library/gfmr10.pdf>.

¹⁹ International Panel on Fissile Materials, "Pakistan," <http://fissilematerials.org/countries/pakistan.html> (updated February 3, 2013).

²⁰ Pakistan Inter-Services Public Relations, news release no. PR94/2011-ISPR, April 19, 2011, https://www.ispr.gov.pk/front/main.asp?o=t-press_release&id=1721.

The third driver frequently cited by Pakistanis is the 2005 U.S.-Indian civilian nuclear cooperation deal, approved by Congress in 2008. This deal allows India, under IAEA supervision, to import uranium to fuel its civilian nuclear reactors. Notionally, India is therefore free to divert the entirety of its domestic uranium stocks toward military use and leverage international suppliers to fuel its civilian installations. Regardless of whether India has adopted this offset strategy, the history of conflict on the subcontinent compels Pakistani security managers to prepare for the worst by fielding a suite of delivery means and augmenting fissile material production.

"...Pakistan's arsenal expansion is a symptom of the mutual mistrust and security dilemma in South Asia. Given the history of crisis and war on the subcontinent, Pakistan views India through a dark lens and perpetually hedges against India's military dominance."

Taken together, the three drivers listed above indicate that Pakistan's arsenal expansion is a symptom of the mutual mistrust and security dilemma in South Asia. Given the history of crisis and war on the subcontinent, Pakistan views India through a dark lens and perpetually hedges against India's military dominance. If détente were to prevail between India and Pakistan, the nuclear competition could be reasonably expected to decrease with time. Unfortunately, the geopolitical trend lines in South Asia do not bode well for a long-term bilateral rapprochement. Pakistan is looking to deepen its nuclear cooperation with India's rival, China, to counter the U.S.-Indian nuclear accord and the concomitant fissile advantage New Delhi enjoys. Sino-Pakistani nuclear cooperation is not necessarily new, as it has existed since the 1970s before the Nuclear Suppliers Group came into being, but it has increased in recent years.²¹ Today, China is helping construct a nuclear energy complex in Karachi, and a deal for China to provide three additional nuclear power plants is in the works.²² As Sino-Pakistani cooperation magnifies, India will suspect collusion and encirclement. Mistrust will increase, intensifying the security dilemma and spoiling the prospects of détente. As a result, vertical proliferation is likely to proceed apace, not only in Pakistan, but also in India, and international arms control efforts such as the Fissile Material Cutoff Treaty will remain in limbo.

Nonproliferation Diplomacy

Since the mid-1970s, the United States has experimented with three different diplomatic approaches to curtail Pakistan's nuclear program, but only one of these approaches remains viable today. The first approach was one of bilateral inducement and took place in

²¹ Critics argue that Sino-Pakistani nuclear cooperation is forbidden by the NSG, but Beijing counters that its nuclear dealings with Islamabad existed before the founding of the NSG and are therefore grandfathered.

²² Saeed Shah, "Pakistan in Talks to Acquire 3 Nuclear Plants from China," *The Wall Street Journal*, January 20, 2014, <http://online.wsj.com/news/articles/SB10001424052702304757004579332460821261146>.

the Cold War context of the 1970s and '80s. The United States offered to provide military technology to Pakistan to offset its conventional imbalance with India. The idea was that if Pakistan felt confident in balancing India conventionally, it would forego its nuclear ambitions. This policy failed because Pakistan insisted that its nuclear program was peaceful and was not convinced that conventional weaponry could replace nuclear deterrence. Further, Pakistan was not assured that the United States would be a reliable long-term provider of conventional weapons, given the arms embargo imposed after the 1965 Indo-Pakistani War and the sanctions that were applied in the late 1970s. Today, substantive military sales are a non-starter given the blowback it would generate for U.S.-Indian relations and the lack of bipartisan support for Pakistan in Congress. Pakistan thus continues to rely on nuclear weapons to offset the growing conventional asymmetry with India.

The second U.S. approach was to focus on multilateral diplomacy. India's 1974 nuclear test prompted the formation of the Nuclear Suppliers Group (NSG) – an international export control regime designed to restrict the transfer of sensitive nuclear components and dual-use technology to non-NPT states. Other export control apparatuses were subsequently formed to bolster the global nonproliferation establishment, such as the Missile Technology Control Regime (1987) and the Australia Group (1985).²³ International treaties such as the Comprehensive Test Ban Treaty (1996) and the Fissile Material Cutoff Treaty (proposed in 1993 and yet to be negotiated) were designed – in part – to stall the nuclear programs of non-NPT states. Pakistan resisted these export control regimes and international treaties, interpreting them as an attempt to blunt its nuclear aspirations.

The U.S. third approach involved unilateral sanctions and nonproliferation laws intended to derail Pakistan's nuclear program. Examples include the Symington Amendment (1976), Glenn Amendment (1977), Solarz Amendment (1984), and the Pressler Amendment (1985). In general, these laws forbade foreign aid to non-NPT states that were actively pursuing nuclear capability or illicitly exporting nuclear technologies abroad. At best, these instruments slowed down Pakistan's nuclear weapons program but ultimately failed to dent its ambitions – especially since the United States abandoned the sanction strategy during the Soviet war in Afghanistan and instead showered Islamabad with economic and military aid.²⁴ After the Cold War ended, the United States re-imposed sanctions in an effort to coerce Pakistan to “cap and roll back” its nuclear program, but this failed to deter Pakistan's 1998 nuclear test. Sanctions were lifted again in 2001, owing to Washington's

²³ Note that the Australia Group's export control lists are aimed at preventing the spread of chemical and biological weapons and technologies. The Australia Group therefore supplements the Chemical Weapons Convention (1997) and Biological Weapons Convention (1975).

²⁴ Of note, Pakistan was ready for a nuclear explosive test in 1984-85 but decided against it, primarily because it would have jeopardized the continued provision of aid.

need to maintain Pakistani counterterrorism and counterinsurgency cooperation in the Afghanistan-Pakistan borderlands.

In Pakistan today, the only surviving aspect of the three-pronged U.S. nonproliferation strategy is multilateral diplomacy – specifically export control agreements and nonproliferation treaties. Although Pakistan is not a formal member of the global export control regime, Pakistan has passed its own domestic export control laws that mirror the international best practices as defined by the NSG, Missile Technology Control Regime, and Australia Group. Pakistan's efforts are part of a messaging strategy to erase the stigma of the A.Q. Khan affair and show the world that it is a responsible nuclear power that deserves unimpeded nuclear commerce. Pakistan's hope is that the United States and international community will reward its responsible behavior by easing export control restrictions and perhaps supporting Pakistani membership in the NSG. In reality, however, Pakistan's NSG membership bid lacks international backing. India's candidacy, meanwhile, is supported by the United States, France, Britain, and Russia.

Washington's support for Indian membership in the NSG is a major point of contention in U.S.-Pakistani relations. Pakistanis in Track II fora often accuse the West of nuclear discrimination and unjust isolation. They hold that the NSG admission process has become politicized and find it ironic that India, the country whose 1974 nuclear test prompted the formation of the NSG, is being considered for membership while Pakistan remains

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excluded. There is a serious risk that Pakistan, at some future date, may become disillusioned with its quest for nuclear normalcy and abandon its cooperation with the international nonproliferation regime altogether. If India is to be granted a place in the NSG, Pakistan should be offered a roadmap or set of criteria for eventual accession. This would do much to maintain Pakistan's "buy-in" for the global export control regime.

While the debate over export controls continues, Pakistan's participation in multilateral nonproliferation treaties is in stasis. Pakistan actively participated in the negotiation of the Comprehensive Test Ban Treaty but has refused to sign it until India agrees to do so. As for the Fissile Material Cutoff Treaty (FMCT), Pakistan has reservations about its scope and purpose and has blocked its negotiation. Pakistan contends that the "cutoff" implies that the treaty, when enforced, would place a ceiling on fissile material production without accounting for fissile material stockpiles. Since India's fissile material stockpile is greater than Pakistan's, the treaty would freeze Pakistan at a disadvantage. Pakistan continues to delay the FMCT in order to grow its fissile material stocks and to signal its displeasure with the U.S.-Indian nuclear deal.

Nuclear Stability

The question of nuclear stability in South Asia – also known as deterrence stability – accrued newfound urgency in the wake of India’s and Pakistan’s 1998 nuclear tests. With the nuclearization of the subcontinent a fait accompli, some U.S. policymakers, strategists, and academics began to divest attention away from nonproliferation, fixating instead on how to avert the outbreak of war between the two nuclear-armed rivals. Deterrence stability proved tenuous, however, as highlighted by the 1999 Kargil War in the rugged heights of Kashmir, where Pakistani militants and regular forces crossed the Line of Control and occupied Indian border posts that had been abandoned in the harsh winter.

Another crisis occurred in 2001-2, after Pakistan-based militants from Lashkar-e-Taiba and Jaish-e-Mohammed attacked the Indian Parliament building in New Delhi, killing seven and injuring 18. The 2001-2 standoff culminated in India’s Operation Parakram, wherein India mobilized its strike corps to the international border after weeks of delay. During these crises, international intervention played a critical role in restoring peace. Yet India, increasingly fed up with Pakistan’s use of non-state actors as an irregular military force and embarrassed by its slow mobilization during Operation Parakram, embarked upon a military doctrinal review. This review culminated in the 2004 announcement of a rapid-mobilization, limited war doctrine that observers have dubbed “Cold Start.” Cold Start, if actualized, would involve sending several division-sized integrated battle groups (IBGs) in a shallow incursion across the international border within days of a crisis. The objective of Cold Start would not be to seize large portions of territory, but to punish Pakistan for some transgression (e.g., cross-border militant attacks) and avoid triggering Pakistani nuclear redlines in the process.

Since the disclosure of Cold Start, the nuclear stability forecast in South Asia has been increasingly gloomy. Pakistan doubts that Cold Start’s aims are truly “limited” and has therefore sought to augment its security, most recently with the introduction of short-range tactical nuclear weapons (TNW) such as the 60 km *Nasr*. Thus, Cold Start has inadvertently brought about the latest round in a high-stakes action-reaction cycle. Cold Start has compressed the operational timeframe for military action, and TNW have lowered the threshold for nuclear use. For these reasons, a crisis-triggering event may rapidly proceed to full-scale war, and nuclear escalation may occur swiftly thereafter.

Nuclear stability is perhaps the most talked-about subject in U.S.-Pakistani Track II discourse. Drawing from over a decade of Track II meetings, this report identifies nine major variables that are disrupting the nuclear stability equation in South Asia: (1) the enduring rivalry and security dilemma between India and Pakistan; (2) military doctrinal dissonance; (3) tactical nuclear weapons; (4) sea-based deterrents; (5) nuclear command

and control challenges; (6) ballistic missile defense; (7) conflict escalation dynamics; (8) tepid progress in confidence-building and arms control; and (9) emerging flashpoints for conflict. Each variable is examined in detail below.

Enduring Rivalry & Security Dilemma

The enduring rivalry between India and Pakistan is the root cause of the security dilemma and destabilizing arms race in South Asia. Fearing India's military capabilities and intentions, Pakistan has fielded eight new nuclear delivery systems since 1998, and India has responded with nine of its own, though New Delhi's security calculations also account for China.²⁵ The Indo-Pakistani rivalry has been heavily debated in academia and Track II and is a key driver of nuclear instability on the subcontinent, both historically and for the foreseeable future.

“Fearing India’s military capabilities and intentions, Pakistan has fielded eight new nuclear delivery systems since 1998, and India has responded with nine of its own...”

The sources of the enduring Indo-Pakistani rivalry are threefold. First is the unresolved ideological disagreement of the 1947 partition. India has always opposed the “two nation theory” on the basis that the subcontinent should be unified by its common ethnicity and heritage, rather than divided along the religious fault-lines of Hindu versus Muslim. This line of thinking portrays Pakistan as an extension of India at best, and a breakaway province at worst. Second is the disputed territory of Kashmir, which has been the flashpoint for three of the four Indo-Pakistani wars and is an emblem of the ideological dispute over the partition. Pakistan claims Kashmir based on its Muslim majority population and geographic contiguity, whereas India's claim is based on the 1947 Instrument of Accession and India's claim to maintain its secular state credentials. The third irritant is Pakistan's employment of subconventional forces (i.e., militant groups) to fuel an insurgency in India-administered Kashmir, beginning in 1989. Since the start of the Kashmir insurgency and the concomitant Soviet retreat from Afghanistan, Pakistan has found it increasingly difficult to exert full control over the militant groups based within its borders, such as Lashkar-e-Taiba (LeT) and Jaish-e-Mohammed (JeM). Today, these groups are wildcard spoilers in the Indo-Pakistani relationship; they can bring the two countries to the brink of crisis and war at the time of their choosing, as evidenced by the 2001 attack on the Indian parliament building and the 2008 Mumbai attack. India believes that the Pakistani government is complicit in these attacks, though Islamabad insists that

²⁵ Since 1998, Pakistan has introduced the following delivery systems, in chronological order: Hatf-5/*Ghauri*, Hatf-4/*Shaheen*, Hatf-2/*Abdali*, Hatf-3/*Ghaznavi*, Hatf-6/*Shaheen*, Hatf-7/*Babur*, Hatf-8/*Ra'ad*, and Hatf-9/*Nasr*. India has introduced the Agni-II, BrahMos, Agni-I, Agni-III, K-15/*Sagarika*, Agni-IV, Prahaar, Agni-V, and Nirbhay.

perpetrators are terrorists who acted independently and illegally. Islamabad also accuses New Delhi of funding its own insurgency in the Pakistani province of Baluchistan.

The enduring rivalry's impact on the Indo-Pakistani security dilemma has been debated exhaustively on the Track II circuit, with particular emphasis on the controversial use of subconventional forces. One subject that is potentially worth closer examination, however, is how the U.S. rebalance to the Asia-Pacific could aggravate the Indo-Pakistani security dilemma in the coming years and decades. Increased U.S. military presence in the Pacific obliges China to augment its conventional and nuclear forces, which naturally compels New Delhi to follow suit. Although India's military investments are aimed at deterring Chinese adventurism, the history of enduring rivalry between India and Pakistan means that any qualitative or quantitative improvement in India's arsenal poses a danger for which Pakistan must account. Pakistan, however, is unable to compete with India in the conventional realm due to fiscal constraints and therefore doubles down on its nuclear program to maintain a competitive, albeit asymmetric, edge. The strategic ripple effect does not end there. Indo-Pakistani military advancements cast a shadow on Iran; Iranian investments threaten Saudi Arabia and Israel; and so on. By fostering discussion of this complex strategic cascade in the Track II circuit, the United States will be better equipped to anticipate and understand the delayed effects that the Asia-Pacific rebalance will have on security competition in South Asia and beyond.

Military Doctrinal Dissonance

The dissimilar nuclear use doctrines of India and Pakistan, coupled with conventional doctrinal evolutions that emphasize rapid military mobilization and deployment have both raised the stakes and reduced the lead times of conflict in South Asia. The end result is a regional environment in which a conflict that begins as limited and conventional could rapidly spiral to a full-blown nuclear exchange.

India's declaratory nuclear doctrine, revealed in 2003, is no first use (NFU) but vows massive retaliation against any state that employs WMD of any yield against Indian forces at any time or place. A defensive Pakistani nuclear strike against an invading Indian armored column, for instance, would notionally trigger massive retaliation, even if the strike occurred on Pakistani soil. Critics in Track II fora have decried this policy as brute-force, disproportionate, knee-jerk, and therefore non-credible. Indian proponents of massive retaliation contend that the policy enhances India's deterrence credibility because it is unambiguous and publicly declared.

"The dissimilar nuclear use doctrines of India and Pakistan, coupled with conventional doctrinal evolutions that emphasize rapid military mobilization and deployment have both raised the stakes and reduced the lead times of conflict in South Asia."

Public declaration obliges New Delhi to follow through with the policy if it is tested, lest India's credibility be reduced to shreds.

Where India has embraced nuclear doctrinal transparency and NFU, the Pakistanis have embraced ambiguity. In keeping with this ambiguous posture, Pakistan reserves the right for nuclear first use but refuses to explicitly declare its nuclear redlines, instead opting to leave them shrouded in a fog of uncertainty. So the Pakistani thinking goes, this uncertainty paralyzes Indian decision-makers by forcing them to second-guess as to when, where, and under what circumstances Pakistan would use nuclear weapons. An opaque nuclear doctrine also affords deployment and employment flexibility, helping Pakistan avoid the same kind of commitment trap that India would face if its massive retaliation doctrine were tested. Despite Pakistan's ambiguous redlines, some general and vague thresholds have been declared. In a 2002 interview, Lt. General Khalid Kidwai, Director-General of the Strategic Plans Division, stated that if Pakistan suffers an unacceptable degree of spatial ingress, physical destruction, economic strangulation, and/or domestic destabilization from an outside power, it will be grounds for nuclear retaliation.

Taken at face value, India and Pakistan's nuclear doctrines create a dangerous causality chain. A limited, defensive first use by Pakistan would incur Indian massive retaliation, which would elicit a punitive second strike from Pakistan's surviving nuclear assets. Making matters worse, India and Pakistan's conventional force doctrines emphasize rapid mobilization and high-intensity warfare. In the event of cross-border hostilities, these doctrines could act as a swift onramp to nuclear escalation. India's conventional war doctrine, known as Cold Start or "proactive" operations, would entail shallow ground incursions across several sectors of the international border within 48-72 hours, using up to eight division-sized integrated battle groups (IBGs) with close air support. The purpose of Cold Start would be to punish Pakistan for its history of subconventional provocation toward India but to keep the conflict limited in such a way that Pakistan's nuclear redlines are not violated. Not to be outdone, Pakistan revealed a new army doctrine in 2011, titled "Comprehensive Response." Although Comprehensive Response is defensive in nature, it ups the ante in terms of mobilization time, calling for Pakistani defensive garrisons to reach their battle areas in just 24-48 hours.²⁶ Decreased mobilization time also grants Pakistan the agility to mount a counteroffensive across the international border at the place of its choosing as a riposte to Indian attack.

²⁶ Pakistan Army Doctrine and Evaluation Directorate, "Pakistan Army Doctrine 2011: Comprehensive Response," December 2011, 43-4.

“Although Cold Start is meant to be a limited war, a recurring theme in workshops and table-top exercises with Indians and Pakistanis is that both sides are forced to ‘prepare for the worst’ during conflict with one another.”

Cold Start and Comprehensive Response mean South Asia is poised for a rapid-onset, high-intensity conflict. Although Cold Start is meant to be a limited war, a recurring theme in workshops and table-top exercises with Indians and Pakistanis is that both sides are forced to “prepare for the worst” during conflict with one another. India, upon actualizing Cold Start, would not only mobilize and attack with its IBGs but would also begin moving its three strike corps toward the international border – just to have them in position in case the war escalates. Pakistani ISR would pick up the movement of India’s strike corps, and fearing a full-scale Indian assault, the army would begin withdrawing its forces from the western tribal areas and redeploying them eastward. India, in turn, would interpret Pakistan’s redeployment as a major escalation signal and intensify deep air interdiction operations to prevent these forces from reaching the front lines. By this point, both sides would likely begin dispersing their strategic nuclear arsenals (or at least maintaining high alert status), and Pakistani tactical nuclear weapons would most certainly have appeared in the battle areas – a perturbing development given Islamabad’s refusal to commit to NFU and New Delhi’s promise to retaliate massively. Although it is unknown what precise conditions would compel Islamabad to order the use of tactical weapons, Track II dialogues with Pakistanis have provided insight into the drivers and implications of the country’s tactical nuclear weapons program.

Tactical Nuclear Weapons

In April 2011, Pakistan’s Inter-Services Public Relations Directorate announced the first flight test of the Hatf-9/*Nasr*, a solid-fuelled 60 km-range ballistic missile designed to deliver “nuclear warheads of appropriate yield with high accuracy.”²⁷ The *Nasr* is fired from a road-mobile multiple launch rocket system (MLRS), providing a high degree of battlefield maneuverability. With these attributes, it is clear that *Nasr* is a low-yield tactical nuclear weapon (TNW), but why has Pakistan developed TNW, and what implications do TNW portend for nuclear stability?

“Pakistan’s logic for developing TNW is rooted in the fear that a nuclear deterrent composed solely of high-yield, city-busting warheads lacks credibility against a limited conventional attack in the flavor of Cold Start.”

Pakistan’s logic for developing TNW is rooted in the fear that a nuclear deterrent composed solely of high-yield, city-busting warheads lacks credibility against a limited conventional attack in the flavor of Cold Start. Pakistan hopes that TNW will lower the nuclear threshold

²⁷ Pakistan Inter-Services Public Relations, news release no. PR94/2011-ISPR.

and thereby deny India the space to wage a conventional war under the nuclear overhang. TNW are therefore an indispensable element of what many Pakistani officials refer to as “full-spectrum deterrence.”

If India does initiate Cold Start, however, full-spectrum deterrence would fail. Pakistanis in Track II fora have signaled a willingness to employ TNW on their own soil against marauding Indian forces. Although this would nominally trigger massive retaliation from India, Pakistanis strongly doubt that New Delhi would “go strategic” for two primary reasons. First, massive retaliation against a limited defensive use of TNW in Pakistani Punjab or Sindh is disproportionate and arguably non-credible. Second, Indian massive retaliation would prompt a Pakistani second strike, thus the specter of “mutually assured

“Retired Indian flag officers in various Track II meetings have stressed that battlefield-deployed Nasr platforms will be promptly targeted via airstrikes and ground attack wherever they are found... If Pakistan finds itself in danger of losing its battlefield deterrent, there will be considerable pressure to ‘push the button.’”

destruction” should dissuade India from using its strategic nuclear assets in the first place. Pakistanis think that the more credible and reasonable Indian response would be a nuclear “tit-for-tat.” Indian participants in Track IIs, in contrast, are adamant that a TNW strike would trigger massive retaliation. They furthermore insist that the appearance of TNW batteries on the battlefield will not dissuade or deter India’s political leadership or military brass.

In the event of an Indo-Pakistani war, a worrying scenario could emerge where Pakistan faces a “use it or lose it” dilemma over its battlefield-deployed nuclear weapons. Retired Indian flag officers in various Track II meetings have stressed that battlefield-deployed *Nasr* platforms will be promptly targeted via airstrikes and ground attack wherever they are found. Recall that *Nasr* has just a 60 km range, so even if the launchers were deployed a full 60 km inside the Pakistani border,

invading Indian ground forces would be relatively proximate from the initial point of ingress and could rapidly close in. If Pakistan finds itself in danger of losing its battlefield deterrent, there will be considerable pressure to “push the button.”

Sea-Based Deterrent

The introduction of sea-based nuclear delivery systems in South Asia will have serious implications for Indo-Pakistani crisis stability and deterrence stability in the current decade and beyond. India’s *Arihant* SSBN is already in limited operational capacity and will be armed with nuclear-capable K-15/*Sagarika* ballistic missiles with 700 km range. In an effort to keep pace, Pakistan inaugurated its Naval Strategic Forces Command in 2012 and seeks to operationalize a sea-based deterrent by means of *Agosta*-class submarines armed

with nuclear-tipped cruise missiles. Pakistani surface vessels could also be armed with nuclear weapons. Some Pakistanis have suggested that Islamabad does not envision a first strike mission for its sea-based nuclear assets, even against a target of opportunity such as a carrier strike group. Instead, Pakistan's sea-based deterrent is just that – a deterrent – that is charged with maintaining the survivability of the country's retaliatory second strike.

Academic and strategic discourse on deterrence stability in South Asia has traditionally been land-centric, but as naval forces expand and go nuclear, it is important to leverage Track II to assess the impact they will have on the stability equation. One of the potential consequences of operational sea-based deterrents is dangerous uncertainty on the high seas. A surface ship conducting anti-submarine warfare, for example, has no way of knowing whether its undersea target is nuclear-armed, but if *Arihant* or a nuclear-armed *Agosta* are sunk, it could cause an escalatory spiral regardless of the attacker's intentions. While this scenario may seem like a remote contingency, two factors could greatly increase its likelihood. First, new platforms such as the P-8 *Poseidon* maritime patrol aircraft are making it easier to seek out and target submarines. India has placed orders for at least eight of these platforms. The second factor involves naval deployment density. India and Pakistan are geographically contiguous and their navies share the western Indian Ocean, thus naval deployment density is nominally greater than during the Cold War, wherein the United States and Soviet Union were geographically distant and their naval deployments were dispersed throughout the vast expanses of the Atlantic, Pacific, and beyond. Deployment density in the Indian Ocean region will only increase in the coming years as China expands its naval reach, India reacts, and Pakistan counter-reacts.

In summary, it is apparent that India and Pakistan are beginning an era of strategic competition at sea. Track II discussion of this topic has been relatively scarce, so it is prudent to begin gathering and consulting with experts to think through the implications that sea-based deterrents pose for crisis and deterrence stability in the Indian Ocean.

Command and Control Challenges

The advent of TNW and sea-based delivery systems has stirred debate over Pakistan's nuclear command and control (C2) system. Pakistanis insist that C2 of nuclear assets is irrevocably centralized in the hands of the National Command Authority. While this may be feasible for land-based strategic weapons, centralized C2 of road-mobile, short-range TNW is conceptually and logistically difficult. The lead time required for obtaining launch authorization could impede field commanders from capitalizing on fleeting, high-value targets, such as a massed Indian armored column. Further complicating matters, the launch code transmission could be jammed by the adversary and rendered indecipherable.

For this reason, it is possible that the Pakistanis may quickly abandon centralized C2 early in a crisis and grant predelegated launch authority to forward-deployed field commanders, thereby increasing the risk of inadvertent use. Pakistanis in Track II venues have heard these concerns many times but counter that the deployment of TNW is hypothetical and their primary purpose is to deter Indian aggression in the first place. Yet these hypothetical fears will become timely and tangible if India does decide to embark upon a punitive operation into Pakistani territory.

It is similarly challenging to articulate centralized C2 for sea-based nuclear assets. As mentioned previously, India has the *Arihant* SSBN and Pakistan intends to use *Agosta*-class submarines and/or surface ships as launch platforms for nuclear-tipped cruise missiles. As with road-mobile assets, seagoing vessels obviously lack a cable link with central command. This implies that centralized launch orders must be conveyed via radio transmission and can therefore be intercepted and/or jammed. Conversely, if C2 is decentralized, then inadvertent or unauthorized use cannot be ruled out. Pakistanis in Track II fora have been adamant that C2 will be centralized on air and land, but it is not known whether this principle will also apply when sea-based nuclear forces go underway. Further Track II discussion is warranted on this subject.

Ballistic Missile Defense

India is developing an indigenous ballistic missile defense (BMD) system as a means to offset growing Chinese and Pakistani missile capabilities. India claims that its system is capable of intercepting incoming long-range missiles at low and high altitudes with high accuracy, though it is unclear whether the system is ready for deployment. India has also

“Despite the skepticism over the technical feasibility of Indian BMD, Pakistani security managers are certain to prepare for the worst and seek the means to countervail a missile shield.”

expressed interest in Israel’s Iron Dome system, which would provide defense against short-range missiles. On the Track II circuit, India’s attempts to achieve comprehensive missile defense have drawn Pakistani ire and skepticism. Pakistanis have strong doubts that Indian engineers can overcome the myriad technical hurdles associated with missile defense, citing the imperfections in U.S. BMD systems. Nevertheless, Pakistanis caution that BMD – regardless of the interception rate – will provide a false sense of security to Indian military planners and incentivize aggressive behavior.

Despite the skepticism over the technical feasibility of Indian BMD, Pakistani security managers are certain to prepare for the worst and seek the means to countervail a missile shield. They have several options at their disposal to achieve this aim. Pakistan can

overcome Indian BMD through sheer force of numbers by increasing its fissile material and missile production capacity. Penetration aids such as MIRVs and MaRVs are another option, as well as high-speed cruise missiles. Yet these technological evolutions are ultimately destabilizing and will prompt India to further augment its nuclear shield and arsenal. The bottom line is that BMD in South Asia will heighten Pakistan's security dilemma and will ultimately accelerate the regional nuclear arms race and the diversification of delivery means.

Conflict Escalation Dynamics

A number of recent Track II meetings have examined conflict escalation dynamics between Pakistan and India. These meetings have frequently taken the form of table-top exercises (TTXs) convening retired Pakistani and Indian flag officers, civilian government officials, and academics. These Track II efforts are continuing, but general findings thus far suggest that a limited conflict in South Asia is likely to escalate rapidly into a full-blown conventional war with a significant risk of nuclear exchange. The root cause of this upward escalatory pressure is mutual mistrust, which necessitates all-out mobilization by both Pakistan and India at the onset of hostilities.

Imagine a scenario in which India launches limited, cross-border raids into Pakistan, perhaps in retaliation for a terrorist attack similar to 2008 Mumbai. Although its intentions are limited, New Delhi will be compelled nonetheless to mobilize its strike corps in order to pose a more credible and balanced military threat. Pakistan, for the same reason, will rapidly mobilize to meet the Indian threat and redeploy the bulk of its western military forces to the eastern border. Military necessity will then require India to leverage its air force to interdict and prevent Pakistan's army reserves from reinforcing the front lines. Islamabad, fearing the worst of Indian intentions and faced with the prospect of total war, may then choose to disperse and deploy its nuclear assets (both tactical and strategic) to deter further Indian action. By this point, the potential for a nuclear exchange becomes precariously high, particularly if India interprets Pakistan's nuclear deployments as an offensive gambit and begins striking Pakistan's nuclear sites and launch platforms. The scenario outlined above conveys the point that conditions in South Asia are prime for a swift and deliberate movement up the escalation ladder.

While conflict escalation dynamics have garnered significant Track II attention, conflict de-escalation and war termination remain relatively unmapped subjects. Future Track IIs should address this research gap, perhaps in the form of a TTX that drops the players in the middle of a simulated conflict and asks them to design and execute a credible war termination plan.

Confidence-Building and Arms Control Gridlock

The distinct lack of progress in diplomatic normalization and strategic restraint between India and Pakistan is hampering the long-term prospects for nuclear stability. Strategic restraint is comprised of two elements: confidence-building measures (CBMs) and arms control agreements. There is a prevailing feeling that most of the low-hanging confidence-building fruit has already been plucked. CBMs currently in place include ministerial-level crisis hotlines, 1991 agreements on mutual notification of military exercises and respecting one another's airspace, a 1998 nuclear non-aggression accord, a 2005 ballistic missile flight test notification agreement, and the 2007 nuclear accident notification agreement. Efforts aimed at expanding these agreements are hindered by the fact that CBMs have failed to defuse previous crises. The bilateral and much-lauded Lahore Declaration of February 1999, for example, proved inconsequential three months later when Pakistani operatives infiltrated India-administered Kashmir and sparked the Kargil War.

Whereas the pace of CBMs has been languid, the status of arms control is virtually frozen. Pakistan and India remain suspicious that international arms control efforts are designed to constrain emergent nuclear powers, and the subject never gains traction in Track I. As a result, there is no legal framework in place to limit the rapid expansion of conventional, missile, and nuclear forces on the subcontinent, nor are there any agreements on the books to curtail fissile material production. Pakistan and India, for example, are both holdouts of the Comprehensive Test Ban Treaty, and Islamabad continues to oppose the FMCT on the grounds that it would institutionalize a fissile material disadvantage with New Delhi.²⁸

"Pakistan and India remain suspicious that international arms control efforts are designed to constrain emergent nuclear powers, and the subject never gains traction in Track I."

The United States can help break the confidence-building and arms control stalemate in South Asia with a concerted diplomatic push for an Indo-Pakistani strategic restraint regime (SRR). The SRR should have four components. First, India and Pakistan should eschew the use of low-intensity conflict and subconventional actors as a tool of national policy. Until the two countries reach an amicable understanding on this contentious issue, cross-border terrorism will continue to spoil peace and stability in the region. Second, India and Pakistan should take concrete steps to promote bilateral trade and investment. As economic connectivity increases, conflict will become more costly, bilateral relations will gradually improve, and stability will persevere. Reports that Pakistan is considering most-favored nation trading status for India is a step in the right direction. Third, New

²⁸ Note that New Delhi enjoys the benefit of external uranium supply thanks to the U.S.-Indian nuclear deal.

Delhi and Islamabad should adopt a recessed border defense posture and establish a series of low-force zones. India, for its part, should eschew its Cold Start doctrine in a way that eases Pakistan's strategic anxieties and allows Islamabad to take the lead in the fourth component of the SRR: nuclear restraint. Specifically, Pakistan should halt further development of low-yield, tactical warheads and cut its nuclear expenditures in a transparent manner. Obsolete delivery systems such as the Privthi-1 SRBM and Hatf-1 SRBM ought to be cooperatively dismantled as a means of inspiring mutual trust and assurance without degrading either side's net deterrence quotient. If this dismantlement program is successful, it could be expanded to include Privthi-2 and Hatf-2 as these systems age. Ultimately, India and Pakistan should negotiate a South Asian nuclear non-deployment zone and shun strategically destabilizing technologies such as BMD and penetration aids.²⁹

A strategic restraint regime in the formulation outlined above would temper the Indo-Pakistani security dilemma, cool strategic anxieties, and slow the action-reaction cycle of military force development. Eventually, the SRR could even bring the enduring rivals to state of rapprochement. It is an ambitious goal, however, and will only be achievable if India and Pakistan are able to set their differences aside and accept some degree of political risk in exchange for the possibility of long-term harmony.

Emerging Flashpoints for Conflict

Several major flashpoints for conflict exist on the South Asian subcontinent. Some of these flashpoints, such as the threat posed by non-state actors, are well known and have been debated extensively in the Track II arena. Other flashpoints, however, are slowly emerging and are only beginning to gain traction on a Track II level, such as water disputes. With Pakistan being a lower-riparian state, conflict could occur if India diverts the flow of water originating from India-administered Kashmir away from Pakistani Punjab.

Another potential flashpoint, discussed previously, is an inadvertent nuclear crisis on the high seas. India's *Arihant* SSBN will complete New Delhi's triad of land-, air-, and sea-based nuclear delivery systems, and Pakistan is actively developing a pelagic deterrent of its own. Naval skirmishes are generally considered less escalatory than engagements on land, but this could change dramatically and spectacularly if one or more of the vessels are nuclear-armed, unbeknownst to the adversary.

²⁹ For an in-depth look at the proposed SRR framework, see Feroz Khan, "Strategic Restraint Regime 2.0," in *Deterrence Stability and Escalation Control in South Asia*, ed. Michael Krepon and Julia Thompson (Washington, DC: Stimson Center, 2013), 161-73.

As the conventional force trajectories between India and Pakistan widen and the Sino-Pakistani partnership deepens, there is concern among some Pakistani scholars that India may adopt a more aggressive posture along its western border to intimidate Islamabad into submission. Airspace violations, skirmishes along the Line of Control in Kashmir, large-scale military exercises may become more frequent, especially if New Delhi is confident in its BMD systems. Under these circumstances, a conflict could quickly materialize and escalate before the international community can intervene.

Nuclear Security & Safety

Nuclear security and safety was not a major issue in U.S.-Pakistani relations until after 9/11. Three factors precipitated this change. First, reports emerged that two retired Pakistani scientists had met with Osama bin Laden in the summer of 2001, raising questions of personnel reliability. Second, the formation of the Tehrik-i-Taliban Pakistan (TTP) insurgency in 2007 gave rise to a string of terror attacks, including attacks on Pakistani military bases. Third, religious radicalization became a serious societal trend in the country. Taken together, these factors led to increased scrutiny about Pakistan's security and safety protocols. As Pakistan continues to battle mounting religious extremism and insurgency, two prominent security fears come to mind – first, that the TTP or a similarly radical group might somehow seize power and gain control of the country's nuclear arsenal; and second, that individuals who are hired to provide security or otherwise maintain the country's nuclear facilities could turn out to be extremist sympathizers, perhaps causing a nuclear accident, smuggling fissile material out of the country, or even stealing a warhead. Despite persistent fears of such a “low probability, high impact” event, the United States publicly lauds Pakistan's progress in improving its nuclear security apparatus. The 2011 Fukushima incident, however, proves that a secure facility is not necessarily a safe one.

“...the United States publicly lauds Pakistan's progress in improving its nuclear security apparatus. The 2011 Fukushima incident, however, proves that a secure facility is not necessarily a safe one.”

Nuclear security and safety are sensitive topics for Pakistanis on the Track II circuit. Nuclear matters, by default, are treated with the highest state secrecy, and the popular media in Pakistan occasionally makes sensational claims that the United States has contingency plans to capture and dismantle the country's nuclear program. Many Pakistanis are therefore hesitant to engage Americans substantively on such issues in open fora. In spite of these impediments, nuclear security and safety issues continue to be raised frequently at the Track II level. This section examines the several facets of the security and safety debate: personnel reliability, site security, material accounting and transport,

training, disaster response, and weapon surety.

Personnel Reliability

Pakistan has a personnel reliability program (PRP) in place that conducts background investigations to evaluate the trustworthiness of military personnel who will be assigned to work at nuclear installations. The program is administered by the Strategic Plans Division (SPD) and is intended to prevent extremist sympathizers, foreign intelligence agents, and psychologically imbalanced individuals from becoming nuclear custodians and posing an “insider threat.” Pakistan’s PRP is also designed to detect any subsequent changes in individual trustworthiness – for example, religious radicalization – through a method of annual, semiannual, and quarterly review. Individuals who maintain the highest levels of clearance are subject to increased scrutiny. Security vetting for civilian personnel is handled through a parallel evaluation system also run by the SPD, known as the human reliability program (HRP).

Pakistan and the United States have had a cooperative relationship on personnel reliability. After 9/11, the United States offered assistance to Pakistan to establish a rigorous vetting program. The program came together slowly but matured substantially over the course of the last decade. Today, there is no public indication that Washington is dissatisfied with Pakistan’s PRP, as it emulates U.S. best practices. The true effectiveness of the PRP, however, is unknown. Pakistan does not publicize security mishaps or breaches, and the inner details of the PRP are opaque and classified. It is therefore impossible for an external observer to accurately measure the effectiveness of the PRP.

Site Security

Pakistan’s approach to nuclear site security is to deter, detect, delay, defend, and destroy any threat – a concept known as the “five Ds.”³⁰ To accomplish these five tasks, Pakistan has implemented a three-layered intruder detection system, managed by the SPD. The outermost ring is a surveillance and intelligence collection system that provides early warning and detection of imminent or potential threats. The second ring is the SPD’s own security personnel, supplemented by a commando team (“Special Response Force”) that is exclusively tasked with responding to intrusions. The innermost ring consists of exterior and interior physical perimeters such as fences, checkpoints, and personnel-restricted security doors. Measures are also in place to detect and counter any cyber-attack on

³⁰ "National Statement: Pakistan," Nuclear Security Summit 2014, March 2014, <https://www.nss2014.com/sites/default/files/documents/pakistan.pdf>.

Pakistan's nuclear infrastructure, and security procedures are being reviewed and upgraded to safeguard radioactive sources at hospitals.

Material Accounting and Transport

"Pakistani nuclear experts are confident in the robustness of their material accounting and transport practices... within every nuclear installation, scheduled and surprise inspections are conducted to tally fissile material production, stocks, and/or waste."

Pakistani nuclear experts are confident in the robustness of their material accounting and transport practices. Like other facets of nuclear security, this particular issue is not discussed in detail in Track II dialogues – the procedures are technical and highly classified. What is known, however, is that within every nuclear installation, scheduled and surprise inspections are conducted to tally fissile material production, stocks, and/or waste. U.S. experts, however, contend that material accounting is a highly challenging practice that takes time to perfect.

Pakistan's transportation of radiological materials, fissile materials, and warheads is handled through military convoy, with theft-proof and tamper-proof containers and vehicles.³¹ As an added failsafe against nuclear smuggling, the SPD also has installed radiation detection sensors in major ports of entry and exit. The Pakistan Nuclear Regulatory Agency (PNRA), which oversees the civilian nuclear program, maintains its own set of redundant sensors.³²

Personnel Training

Personnel training is handled by Pakistan's "Centre of Excellence for Nuclear Security," an academy which provides instruction in "nuclear security, physical protection, material control and accounting, transport security, and personnel reliability," as well as nuclear disaster preparedness and response.³³ Reportedly, Pakistan is also collaborating with the IAEA to expand its curriculum. Pakistan hopes to become a leading regional provider of nuclear security training, as part of its broader effort to portray itself as a responsible steward of nuclear assets and deserving candidate for NSG membership.

³¹ Pakistanis vigorously deny that their nuclear materials are transported casually in civilian vehicles, as alleged in a 2011 article in *The Atlantic*. See Jeffrey Goldberg and Marc Ambinder, "The Ally from Hell," *The Atlantic*, October 28, 2011, <http://www.theatlantic.com/magazine/archive/2011/12/the-ally-from-hell/308730>.

³² Naeem Salik and Kenneth N. Luongo, "Challenges for Pakistan's Nuclear Security," *Arms Control Today* 43 (March 2013), http://www.armscontrol.org/act/2013_03/Challenges-for-Pakistans-Nuclear-Security.

³³ "National Statement: Pakistan," Nuclear Security Summit 2014.

Incident and Disaster Response

Nuclear incident and disaster response has obtained renewed significance in the wake of the 2011 Fukushima disaster. The PNRA is working closely with the IAEA on several initiatives to bolster Pakistan's incident response capacity. One such initiative is the Nuclear Security Action Plan (NSAP), which aims to augment Pakistan's ability to detect an accidental radiological release and mount an effective response to isolate and secure the contaminated area. Civilian site physical protection is also being upgraded under the NSAP. Lessons learned from the IAEA through NSAP will likely be leveraged to improve safety practices at military nuclear facilities.

Pakistan's current system for responding to an inadvertent radiological release is the Nuclear Emergency Management System (NEMS). The institutions responsible for implementing the NEMS are the Nuclear and Radiological Emergency Support Centre (NURESC) and the National Radiation Emergency Coordination Centre (NRECC). Pakistan insists that the NURESC and NRECC are well equipped to respond to and manage a nuclear accident. At the Track II level, the NEMS has been discussed only tangentially; future Track events should examine disaster response as a stand-alone topic, either as an academic workshop or table-top exercise.

Weapon Surety

The surety of Pakistan's nuclear arsenal is a grey area. Pakistanis have steadfastly maintained that their warheads are one-point safe and cannot be detonated with conventional explosives or tampering. The implication here is that an extremist group that somehow obtained a Pakistani nuclear device would be unable to cause a fissionable event. What Pakistanis perceive as one-point safety, however, may not necessarily be in line with the standards required of the U.S. arsenal. The U.S. Department of Defense Manual 3150.02 defines a weapon as one-point safe when "the probability of producing a nuclear yield exceeding 4 pounds of TNT equivalent is less than one in 1,000,000."³⁴ U.S. history indicates that achieving one-point safety is technologically challenging and requires years of experimentation and testing.

³⁴ Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, *DoD Nuclear Weapon System Safety Program Manual*, DoD Manual 3150.02 (January 2014), 59, <http://www.dtic.mil/whs/directives/corres/pdf/315002m.pdf>.

Nuclear Energy

Although Pakistan has operated nuclear power plants since the 1970s, civilian nuclear energy has not been a historically major issue in U.S.-Pakistani relations. Nuclear power, after all, accounts for just 5.3% of Pakistan's overall energy output, and the military program garners most of the attention in Washington.³⁵ In recent years, however, nuclear energy has become a more prominent subject.

Pakistan is in the midst of its own nuclear renaissance at a time when the Fukushima disaster has cooled the global attitude toward nuclear energy. Pakistan suffers from frequent brownouts and views nuclear power as a sustainable panacea for its energy crisis. According to Dr. Ansar Parvez, Chairman, Pakistan Atomic Energy Commission (PAEC), "Our future plans are to have nuclear power plants supply one-fourth of our total required capacity."³⁶ Specifically, Islamabad intends to generate 8,800 MW of nuclear power by 2030 and up to 44,000 MW by 2050. The 2050 plan would entail 32 nuclear plants, and several are currently under construction with Chinese assistance. To fuel the plants, Islamabad is expanding its own uranium mining capacity and continues to lobby the United States and international community for a nuclear commerce deal.

"Pakistan is in the midst of its own nuclear renaissance at a time when the Fukushima disaster has cooled the global attitude toward nuclear energy."

Washington has continually rebuffed Pakistan's requests for civilian nuclear trade and has instead provided assistance in hydrocarbon (coal, oil, natural gas), hydroelectric, and wind power through USAID. U.S. policymakers are also considering additional support for CASA-1000, the proposed electricity line that would transmit surplus power from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan.³⁷ Pakistan has gladly accepted this aid but has nonetheless turned to China to realize its nuclear energy goals. China has already installed two civilian nuclear power plants at Chashma, with two more under construction. In addition, two ACP-1000 plants are being installed in Karachi, which will provide 2,200 MW in total, and negotiations are underway for China to provide three more plants, potentially in Muzzafargarh.³⁸ China also provides Pakistan with nuclear fuel assistance.

The United States has largely overlooked Sino-Pakistani nuclear collaboration as a means of compensating for its unwillingness to engage Islamabad in civilian nuclear trade, but

³⁵ "Nuclear Share of Electricity Generation in 2013," Power Reactor Information System, <http://www.iaea.org/PRIS/WorldStatistics/NuclearShareofElectricityGeneration.aspx>.

³⁶ Mehtab Haider, "32 Nuclear Plants to Produce 40,000 MW: PAEC," *The News International* (Pakistan), February 27, 2014, <http://www.thenews.com.pk/Todays-News-3-235039-32-nuclear-plants-to-produce-40000MW-PAEC>.

³⁷ The White House, "Joint Statement by President Obama and Prime Minister Nawaz Sharif," news release.

³⁸ Shah, "Pakistan in Talks to Acquire 3 Nuclear Plants," *The Wall Street Journal*.

detractors point out that China's transfer of nuclear technology and fuel to Pakistan, an NPT outsider, is forbidden by the NSG. Beijing counters that its nuclear energy collaboration with Pakistan predates China's accession to the NSG and is therefore "grandfathered."

Critics also caution that the rapid expansion of nuclear power in Pakistan is likely to tax its nuclear security and safety apparatus, increasing the likelihood of an incident or disaster. Moreover, the Chinese ACP-1000 plants under construction in Karachi are untested designs. The potential for an accident has left many Western observers apprehensive, as well as many Pakistani citizens whose homes are in the vicinity of new and planned power plants. Many Pakistanis are also uneasy about the health and environmental effects of nuclear waste disposal.

Undeterred, Pakistan sees nuclear energy as a pathway not only to solve its national energy crisis but to achieve international nuclear prestige, legitimacy, and normalization. Pakistan hopes to demonstrate to the world that it can run and maintain a network of nuclear power plants while following international best practices for security and safety. This will portray Pakistan as a responsible nuclear steward and bolster its case for membership in the NSG and perhaps an eventual civilian nuclear deal with Washington. Even today, Islamabad frequently cites its impeccable safety record in operating nuclear power plants and its good standing with the IAEA in civilian nuclear safeguards.³⁹ As Pakistan asserts in its national statement from the 2014 Nuclear Security Summit at The Hague, "Pakistan qualifies to become a member of the Nuclear Suppliers Group and other export control regimes, on a non-discriminatory basis."⁴⁰ Of note, Pakistan's national statement at the 2012 Nuclear Security Summit in Seoul closed with the same line.

"...Pakistan sees nuclear energy as a pathway not only to solve its national energy crisis but to achieve international nuclear prestige, legitimacy, and normalization."

Civilian nuclear energy is frequently overlooked at the Track II level, but two major performers – the Center on International Security and Cooperation (CISAC) at Stanford University and the University of Ottawa – have zeroed in on this topic. CISAC has examined the prospects for U.S.-Pakistani civilian nuclear cooperation, and the University of Ottawa has convened retired scientists to explore the optics of a bilateral Indo-Pakistani deal. Indian and Pakistani former officials and scientists have recommended regular bilateral meetings with the heads of their respective atomic energy commissions, nuclear regulatory bodies, and emergency response organizations, as well as steps to harmonize disaster response efforts in the event of a nuclear accident.

³⁹ The Pakistan Nuclear Regulatory Authority (PNRA) is the organization charged with overseeing that the security and safety standards of the national nuclear industry. The PNRA coordinates with IAEA.

⁴⁰ "National Statement: Pakistan," Nuclear Security Summit 2014.

The United States should encourage Indian and Pakistani civilian nuclear cooperation. Although the two states remain military competitors, that should not preclude Islamabad and New Delhi from collaborating in the civilian nuclear realm and improving their security and safety processes for mutual benefit. The United States should also open a dialogue with Pakistan on nuclear energy and identify a pathway for normalizing the bilateral nuclear relationship. While a U.S.-Pakistani civilian nuclear deal is unrealistic given the precarious politics it would entail inside the Beltway, the United States does have other options at its disposal. Washington can continue to downplay Sino-Pakistani nuclear collaboration and advocate for a criteria-based approach to membership in the NSG. A criteria-based approach would provide Pakistan a roadmap to eventual membership, counter Pakistan's accusations of nuclear discrimination, and support Pakistan's quest for nuclear normalization. This policy change would allow the United States and Pakistan to finally bury two stumbling blocks – the A.Q. Khan affair and the U.S.-Indian nuclear deal – and do much to deepen and sustain the bilateral relationship as the United States turns its attention toward the Asia-Pacific.

CONCLUSIONS

The past decade of Track II discourse has provided incredible insight into Pakistan's strategic thinking and threat perceptions. It has generated useful and candid debate on nuclear proliferation, stability, security and safety, and energy, and it has forged valuable professional relationships between American and Pakistani experts. Track II, however, does have its limitations. A great deal of redundancy exists on the Track II circuit because there are numerous sponsors and performers with no unity of effort. In addition, Track II findings are slow to influence official policy due to bureaucratic inertia. Nevertheless, the benefits of Track II outweigh the drawbacks. Track II "redundancy" generates a bank of expert analysis and provides deeper insight into a country's strategic culture and risk environment. Moreover, Pakistani officialdom maintains a finger on the pulse of Track II discourse and is therefore continually exposed to fresh policy ideas.

The success of a U.S.-Pakistani Track II event depends heavily upon its methodology, participant makeup, and substantive focus. Track II discussion topics should be narrowly scoped because the resultant dialogue tends to be more fruitful. A broad topic such as "Indo-Pakistani Deterrence Stability," for example, tends to generate highly theoretical discussions, whereas a project that exclusively examines the deterrence implications of sea-based nuclear assets is more likely to invite substantive debate. Participants should ideally be a blend of recently-retired government officials and Track II "veterans," and young and emerging Pakistani security scholars should be invited whenever feasible, as they are Pakistan's future policy advisers and decision-makers. As for the substantive focus of Track IIs, contentious issues should be avoided in the interest of maintaining a productive and harmonious meeting. Four major stumbling blocks are identified below. Americans and Pakistanis tend to have entrenched viewpoints on these issues; they have been debated so fully there are virtually no stones left unturned and should be downplayed wherever possible:

(1) *Allegations that Pakistan is providing safe havens to the Afghan Taliban.* Track II is not a useful venue for debating this issue. Pakistanis steadfastly maintain that they have been a good faith partner in the War on Terrorism and have the casualty numbers to prove it; discussions tend to devolve beyond that point.

(2) *The legacy of the A.Q. Khan network.* Ten years have passed since the network was busted, and Pakistanis argue that it is a dead horse that needs to be buried. Although Western criticisms may have validity, the benefit of revisiting this fully-exhausted issue in the Track II arena is negligible, at best.

(3) *The U.S.-Indian nuclear deal.* Pakistan's displeasure with the U.S.-Indian deal is universally known. There is no need to revisit this issue and reopen old wounds;

instead, discussions should focus on the way forward – for example, the criteria that Pakistan would need to meet in order to qualify for a U.S. civilian nuclear deal or eventual membership in the NSG.

(4) *Drone strikes and associated sovereignty concerns.* Pakistanis acknowledge that drones are tactically effective, yet they bemoan U.S. drone strikes as strategically counterproductive and antithetical to Pakistan's sovereignty (particularly in FATA, where federal reach is delicate to begin with). Americans, meanwhile, counter that drone strikes are necessary given the Afghan Taliban's continued use of FATA as a sanctuary and staging area. The debate on this issue has been thoroughly exhausted; Americans and Pakistanis must agree to disagree.

Just as some issues should be avoided, there are many substantive issues that have been inadvertently overlooked and deserve newfound attention. Track IIs should begin to explore de-escalation strategies for an Indo-Pakistani conflict, because thus far, discourse has focused exclusively on upward escalation dynamics. Participants could be asked to devise credible war termination strategies for a simulated conflict between India and Pakistan; these strategies could be deliberated subsequently in an academic forum or gamed in a table-top exercise. Another topic to examine is Pakistan's role in the U.S. rebalance to the Asia-Pacific. How will the rebalance impact the Sino-Pakistani relationship? Will U.S.-Pakistani interests diverge, converge, or remain flat?

Other focus areas for future events include nuclear disaster preparedness, consequence management, and risk-reduction measures. Nuclear safety issues can only be expected to become more prominent as Pakistan continues to pursue its goal of generating 8,800 MW of nuclear power by 2030. How might Pakistan react to a nuclear accident or near-miss? Additional topics for future debate include the strategic stability implications of new cruise missiles, ballistic missile defense, penetration aids, and sea-based deterrents. What will be the interplay of these new systems and how will they change the strategic balance in South Asia? How will doctrine and command and control evolve or keep pace with the rapid induction of new technologies? How will Indian and Pakistani naval platforms interact after nuclear weapons are thrown into the mix?

It is important to recall that the ultimate goal of the Track II process is to develop informed and innovative solutions to complex policy and security issues. These solutions can help policymakers break the gridlock that often plagues Track I diplomacy. The central policy recommendation of this report, derived from over a decade of Track II interactions between Americans and Pakistanis, is for Washington to identify a potential roadmap for normalizing U.S.-Pakistani nuclear relations. The United States remains vulnerable to accusations of "playing favorites" in South Asia due to the U.S.-Indian nuclear deal. Pakistanis argue they have atoned for the sins of A.Q. Khan, greatly enhanced their nuclear

safeguards, and therefore deserve de facto recognition of their nuclear status. Islamabad has backed up these words by demonstrably improving its nuclear security architecture, and these improvements have been lauded by the United States and NGO reports such as the 2014 Nuclear Threat Initiative Index.

Although a “U.S.-Pakistani nuclear deal” is not politically feasible at this juncture, the United States should consider supporting a criteria-based approach for NSG membership, providing Islamabad an avenue for eventual accession. A nuclear normalization drive of this sort would yield substantial benefits. It would help bury the vitriol of the A.Q. Khan controversy and U.S.-Indian nuclear deal. It would move the entire bilateral relationship forward in a constructive manner, coax Pakistan to drop its opposition to the FMCT, and dampen Pakistan’s nuclear buildup, improving the prospects for peace and stability on the subcontinent. A sustainable peace in South Asia, after all, is indispensable; otherwise a regional crisis could rapidly manifest and distract the United States from its security commitments elsewhere.

Before embarking upon nuclear normalization, however, there are four important prerequisites that the United States and Pakistan should fulfill to repair the structural faults in the bilateral relationship. First, Washington and Islamabad should restore the mutual trust that was lost in the decade after 9/11. Second, policymakers in both capitals should take into account one another’s strategic compulsions and proclivities when crafting regional security policies. Third, the United States should take into consideration Pakistan’s desire for diplomatic parity on par with India; Pakistan, for its part, should continue to consolidate its democracy and combat domestic terrorism. In addition, Pakistan should consider taking demonstrable steps to improve stability and establish détente on the subcontinent. Finally, both states should foster positive public opinion and respond to domestic media reports that grossly and unfairly malign one another. Fulfilling these four prerequisites will require concerted and sustained communication between American and Pakistani stakeholders – both at the official and unofficial level. Track II, by extension, can do much to mend and reinforce the bilateral relationship. It is therefore advisable to expand U.S.-Pakistani Track II engagements on strategic and nuclear matters. These engagements will allow Americans and Pakistanis to discuss strategic issues, identify irritants and common ground, and explore the practicability of nuclear normalization.