



Time to Consider a Trilateral Asian ABM Treaty

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Editor's note: This essay is part of an initiative launched by the Stimson Center's South Asia Program, which we call the [Off Ramps Initiative](#). The nuclear competition among China, India, and Pakistan is accelerating with the introduction of new ballistic and cruise missiles. Counterforce capabilities are growing. China has begun to place multiple warheads on some of its ballistic missiles, Pakistan has advertised its ability to do so, and India has demonstrated this capacity in its space program. Diplomacy is dormant as these and other nuclear capabilities expand. What to do? Stimson has asked rising talent in this field, as well as a few veterans, to offer creative ideas that can help ameliorate and decelerate this dangerous triangular nuclear competition.

Introduction

At the height of the Cold War, the Anti-Ballistic Missile (ABM) Treaty was signed between two superpower rivals based on a counterintuitive logic: the best way to ensure stability is to keep oneself vulnerable to a nuclear strike by the adversary. In other words, the search for invulnerability by either side would prompt a dangerous arms race creating a “security dilemma” in which both countries would end up less secure. The ABM treaty signed in 1972, which continued to be in force until 2002 when the George W. Bush administration unilaterally withdrew from it, not only ensured that a certain amount of checks and balances were brought to bear on the superpower strategic arms race, but also created a great deal of strategic stability between the United States and the Soviet Union. Despite several inadequacies and loopholes, the ABM treaty provided an out-of-the-box solution that did have an overall impact, however limited, on the strategic arms race between the superpowers.

Today, given the alarming pace of developments in strategic arms build-up in southern Asia,¹ it is time for India, China, and Pakistan to think big and out-of-the-box, and perhaps even learn from the Cold War experience. Slowly but steadily, the southern Asian region is entering a new phase of ballistic missile competition characterized by a constant search for countermeasures to defend against these missiles by means of ballistic missile defense (BMD) capability. China's

ballistic missiles can reach all of India, India's 5,500 kilometer-range Agni-V ballistic missile, once inducted, will threaten key Chinese targets, and Pakistan's 2,750 km-range Shaheen-III missile could potentially reach the south of India. In order to deter against these ballistic missile threats, all three states are currently engaged in implementing or contemplating BMD systems, increased missile inventories, and other countermeasures. This competition could have serious implications for strategic stability.

In order to decelerate an intensified triangular strategic competition among China, India, and Pakistan, it makes sense to consider a trilateral ABM treaty among the regional powers specifying constraints and limits on the development of BMD systems in the region. The proposed treaty does not envision a complete rollback or elimination of their BMD systems, but rather would limit them to mutually acceptable limits.

Capabilities and Concerns

China has been developing nuclear-capable ballistic missiles, anti-satellite (ASAT) technology, and BMD systems. In conducting ASAT tests and, most importantly, ground-based, midcourse BMD tests, China seeks to implement an Anti-Access/Area-Denial strategy.² Even though at least some of the Chinese weapon systems are a direct response to American extended deterrence commitments in Asia, India finds it necessary to take counter-measures to deter the Chinese systems. New Delhi also feels that it is caught in the cascade that stems from the quadrilateral nature of the Asian balance of power, where China reacts to the United States, India reacts to China, and Pakistan reacts to worst case assessments of Indian capabilities.³

While no one in New Delhi fears a "bolt from the blue" Chinese nuclear first strike, the realization that Chinese nuclear strategy may be evolving in response to that of the United States, and the existence of a Sino-Pakistani strategic partnership, place New Delhi in a strategic predicament. After all, nuclear deterrence rests on the capability for assured retaliation. Indian strategic planners thus remain unsettled as the Chinese strategic arsenal grows and because India may still not be able to hit key Chinese targets in the event of a crisis.⁴

There have also been worries in India about the development of Chinese ASAT capabilities, testing of which could be useful in the development of BMD.⁵ Indeed, such concerns have also led some to consider countermeasures to offset rising Chinese power. Barath Gopaldaswamy and Gaurav Kampani have argued that India is investing in ASAT technologies due to concerns about China:

The evidence so far suggests that India is keeping its option on the KE (kinetic energy)-ASAT open. India has also indicated some interest in building a ground-based laser program although not much is known about the program in the public domain. Just recently, in March of 2011, DRDO tested a short-range ballistic missile interceptor, a radio frequency seeker, and a fiber-optic gyroscope, as parts of its ongoing anti-ballistic intercept program. These systems could also in theory serve as components of an operational KE-ASAT capability in the future.⁶

India's Defence Research and Development Organization (DRDO) has been investing in BMD technology since at least the mid-1990s.⁷ The BMD program is widely understood to be a spinoff from its Integrated Guided Missile Development Program (IGMDP) which led to the successful development of missiles such as the Prithvi, Akash and Agni. Some of the missiles developed as part of the IGMDP also have interceptor roles. Moreover, the missile technology evolution in India is on-going in collaboration with international partners such as Israel, Russia, and the United States.⁸ India first tested its Prithvi Air Defence (PAD) capability in 2006 and the Advanced Air Defence (AAD) capability in December 2007; there have since been a number of repeat tests.⁹ New Delhi has since been finessing its BMD capability under various test conditions.¹⁰

New Delhi's interest in BMD also reflects concerns about Pakistan that are different from concerns about China. With regards to Pakistan, India is worried about the possibility of a rogue launch of its nuclear weapons, either by insiders within the Pakistan army or terror outfits. To the Indian mind then, a limited BMD would probably be useful in the event of a non-conventional nuclear threat from Pakistan. As I have argued elsewhere,

A limited BMD system increases deterrence by denial. The deterrent effect of BMD is not only applicable between rational state actors but also when non-state (rational or irrational) actors target state actors. For instance, if Pakistan-based non-state actors or rogue elements from the Pakistani armed forces target India with nuclear weapons, New Delhi, considering that such an attack is most likely to be very limited, will be able to properly comprehend and analyze the situation before contemplating an appropriate response. This is only possible if the political decision-making mechanisms and nuclear command and control in New Delhi survive such an attack.¹¹

Rajesh Basrur agrees that missile defense has certain values: "It can limit damage to oneself in the event deterrence fails. There are three ways in which deterrence might not work: if there is an accidental launch, and if there is an unauthorized "renegade" launch, and if an undeterrable adversary engages in suicidal launch."¹² Thus, New Delhi has good reasons to continue to pursue – but not necessarily deploy – BMD technologies. While India has no reason at this point to be worried about the physical security of Pakistan's nuclear arsenal or the robustness of its nuclear command and control, developing BMD systems could help address potential future concerns of this nature, albeit partially.

India's BMD project has made ripples in Pakistan, which believes that under an Indian BMD umbrella with potential outstanding capabilities, New Delhi would be able to carry out a first strike without fearing retaliation. After initially dismissing Indian claims about its BMD program, Pakistani views have become alarmist today: Pakistan not only considers Indian BMD to be deeply damaging to strategic stability in the region, but also is actively exploring ways to defeat it. That said, given its cash-strapped economy, Pakistan's BMD options are likely to be both limited and expensive. Without proactive help from China, Rawalpindi will not be able to match India's BMD capabilities.

Hence Pakistan is more likely to invest in systems to counter or circumvent India's BMD plans, including heavily investing in short-range missiles and tactical nuclear weapons (TNWs) that

cannot be countered by India's BMD systems, placing multiple, independently targetable re-entry vehicles (MIRVs) on some of its missiles, inducting advanced air defense systems produced by China or Russia, and increasing its warhead production. Pakistan has developed and flight-tested MIRV-capable ballistic missiles in order to penetrate an Indian BMD shield. Islamabad has flight tested the 2,200 km-range Ababeel ballistic missile capable of carrying multiple nuclear warheads. A press release issued by Inter-Services Public Relations (ISPR) of Pakistan explicitly stated that the "development of Ababeel Weapon System is aimed at ensuring survivability of Pakistan's ballistic missiles in the growing regional Ballistic Missile Defence (BMD) environment. This will further reinforce deterrence."¹³

Pakistani scholar Mansoor Ahmed explains potential Pakistani countermeasures against the Indian BMD:

Countermeasures could range from Maneuverable Re-entry Vehicles (MRVs) to maneuverable warheads deployed on single warhead systems such as the road-mobile Shaheen-I & II. These missiles can be launched on relatively short notice and are capable of striking targets deep inside India. Pakistan may already have developed MRVs for its Shaheen series of missiles, which would make it difficult for Indian BMD's to shoot them down. However, the development and deployment of Multiple Independently Targetable Re-entry Vehicles (MIRVs) seems to be the logical next step for Pakistan as a response to India's BMD.

With MIRV and miniaturized warhead capability in place, Pakistan is likely to proceed with the deployment of compact and sophisticated plutonium-based boosted-fission and/or thermonuclear warheads on a variety of launch platforms, such as aircraft, land-based mobile or silo-launched ballistic missile sites, and most importantly submarines.¹⁴

Even though Pakistan's ability to build a BMD system that can concern India's defense planners remains limited and remote at this point, there are two principal reasons why Pakistan should be brought under the proposed Asian ABM treaty. For one, being in such an agreement could potentially reduce Pakistan's fears about the Indian offensive capability. Secondly, if Pakistan is kept out of a treaty that India and China enters into, China could potentially circumvent the agreement by helping Pakistan with its BMD systems.

It may be noted that stability considerations apart, both the BMD program and the countermeasures against it are expensive propositions for cash-strapped India and Pakistan.

What Can Be Done?

Given that the developments related to ballistic missiles, ballistic missile defense, and systems to counter BMD are fast progressing in the region, is there anything that the three states could do to effectively control and limit the consequences of these developments? It is unlikely that the three nuclear powers of the region would give up on their BMD pursuits for both strategic and technological reasons. More specifically, therefore, is it possible to have a solution that does not

require the three countries to give up their BMD programs and yet could potentially decelerate the arms build-up?

I argue that one such solution could be to agree to a trilateral – China, India, Pakistan – anti-ballistic missile defense agreement to limit their respective BMD programs to a minimum along the lines of the ABM Treaty of 1972 between the Soviet Union and United States.

The Cold War rivals were conscious of the disastrous implications of ballistic missile defenses for strategic stability and hence entered into an agreement in 1972 to outlaw the building of national missile defenses (NMD) in their respective countries and in the territories of their respective treaty partners to defend against ballistic missiles. Overall, the ABM Treaty had a relatively stabilizing effect on superpower relations. The superpower efforts at limiting the construction of ballistic missile defenses through the ABM Treaty clearly privileged the “mutually assured destruction”-induced stable deterrence over the unilateral search for absolute guarantees of security.

The treaty permitted the two rivals to deploy two fixed, ground-based defense sites with 100 missile interceptors each with one site protecting the national capital and the second to protect an intercontinental ballistic missile (ICBM) field. Later the number of permitted sites was brought down to one each under a 1974 Protocol to the ABM Treaty.¹⁵

The Proposal

My proposal for a trilateral Asian BMD treaty closely resembles the 1972 treaty with some differences. The most significant difference is that the southern Asian version would include three countries instead of two. I propose a treaty rather than an executive agreement given the more formal and binding nature of the former. Some of the basic features of the treaty would be:

1. China, India, and Pakistan would eschew any plans to build NMD umbrellas in their respective countries. The treaty need not cover allies of treaty members since the three states in question have not made any extended deterrence commitments.
2. The trilateral treaty would designate two sites each in each of the countries where BMD systems could be constructed, should the parties to the treaty desire to do so. The distance between these sites could be open to negotiation since the geographical areas of the treaty members vary drastically. Even though the treaty would allow two sites to be under a BMD umbrella, it is only indicative of an upper limit and not an invitation to build up to treaty limits.
3. The three sides would commit to not develop, test, or deploy sea-, air-, space-, or mobile land-based BMD systems meant to protect sites other than those permitted by the treaty. However, they would be permitted to carry out research as well as fixed, land-based testing of missile defense or components thereof.
4. The number of missile interceptors to protect the sites allowed under the treaty would be decided through trilateral negotiations.

5. Since the deployment of several theater missile defense (TMD) systems can defeat the purpose of the proposed ban on NMD, the signatories would not be allowed to build missile defenses in more than two sites, TMD or BMD.
6. In order to avoid further arms racing, the proposed treaty would prohibit transfers of ABM interceptors and radars from other countries to treaty parties and between treaty parties. The technical specifications of such systems could be negotiated.
7. The proposed treaty would prohibit upgrading existing non-ABM missiles, launchers, or radars to have ABM capabilities once the treaty is signed.
8. The proposed treaty would prohibit the deployment of ABM systems or components outside the territory of the treaty partners.
9. The treaty parties would establish a joint commission to discuss details regarding protected sites, compliance, verification, treaty violations, procedures relating to the dismantling of systems.

There are three options regarding limited BMD deployments: a two-site option similar to the original ABM treaty; a single site option, as adopted by the United States and Soviet Union in 1974 by partially modifying the ABM treaty; and a zero-site option. The third option would still allow the treaty parties to continue to pursue research and development and test programs for ASAT or BMD applications. Moreover, even if the state parties agree to either one or two BMD sites, they could be considered as maximum permitted sites for deployment. In other words, they could keep the option open and decide not to deploy BMD systems in any of the permitted sites.

A zero-site option is less likely to be accepted by either China or India given the scientific developments undertaken by both countries over the past several years. For New Delhi, securing its capital from rogue launches using BMD remains an attractive proposition. The reason why two sites rather than one may be preferred by India and China is because their BMD-related developments seem to be moving in that direction. For both China and India, having BMD shields for their capital cities (Beijing and New Delhi) and main financial centers (Shanghai and Mumbai) could be an attractive option. One might argue that BMD deployments, realistically speaking, cannot safeguard these cities. But the two countries have powerful incentives—most importantly pressure from the scientific communities—to move in the direction of developing BMD shields for their capitals and financial centers. At the same time, spending vast sums to expand the BMD program beyond two cities would be seen as wasteful.

Major Challenges

While the deterrent and economic benefits of a trilateral Asian ABM treaty are apparent, negotiating it would not be easy. There are powerful reasons for each of the states to refuse to negotiate, let alone sign it. Foremost among such reasons is the acute trust deficit among the three potential parties. Lack of trust would make it difficult for them to negotiate the treaty and evolve mechanisms for verification. Secondly, India and China may not have confidence in BMD limitations because continued testing on interceptors could occur in the guise of ASAT

tests. Thirdly, China has avoided discussing strategic—read nuclear—issues with India, ostensibly because the latter is not a member of the Nuclear Non-Proliferation Treaty, but actually because Beijing does not wish to acknowledge India as a major regional nuclear power. Given this history, Beijing may hesitate entering into negotiations with India to finalize a serious treaty such as the one proposed.

Moreover, the cascading effect of strategic developments in the region might act as the most potent dampener for an Asian ABM treaty. Even if Chinese BMD developments are a result of its desire to balance extended American deterrence commitments in the region, it has implications for India's BMD decisions. And Indian decisions influence Pakistani strategic calculations. The key source of this cascading nature of strategic decisions is the American presence in the Asia-Pacific, which India endorses and China opposes. Since the United States would not be a party to the proposed treaty, China would be hard-pressed to constrain its strategic options without constraints on U.S. strategic options, as well. This chain reaction can only be avoided if Washington makes explicit and iron-clad, if not treaty-bound, commitments about its strategic posture in the region. An example of such a commitment could be a unilateral undertaking by Washington that it would not seek to undermine the Chinese deterrent through its missile defense deployments in the region.

Why an Asian ABM Treaty Is Still Worth Considering

Despite the challenges identified above, the treaty is worthy of consideration. For one, the alternative is a dangerous, unchecked strategic arms race. Second, the provisions of the proposed treaty broadly cater to Indian and Pakistani insecurities that, if unaddressed, could lead to far greater nuclear requirements. Moreover, significant constraints on BMD deployments would be consistent with China's No First Use and assured destruction strategic postures. Third, despite the hype about BMD systems, both India and China realize that they are both expensive and hardly fool-proof defense systems. Similarly, militaries in all three countries are not great votaries of BMD systems since these systems do not necessarily cater to their organizational or operational requirements. However, foregoing missile defenses in their entirety may not be possible given that defense and scientific establishments in each country remain committed to these programs. Finally, an Asian ABM treaty would give the three countries a chance to deliberate on issues related to the strategic arms race and confidence-building in Asia, a discussion that is long overdue. For all of these reasons, a China-India-Pakistan ABM treaty would help bring much-needed strategic stability to the southern Asian region.

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¹ I use the term Southern Asia to include China in the region since "South Asia" would exclude China.

² Balraj Nagal, "India and Ballistic Missile Defense: Furthering a Defensive Deterrent," Carnegie Endowment for International Peace, June 30, 2016, <http://carnegieendowment.org/2016/06/30/india-and-ballistic-missile-defense-furthering-defensive-deterrent-pub-63966>.

³ Louise Merrington, "The India-US-China-Pakistan strategic quadrilateral," *South Asia Masala*, May 14, 2012, <http://asiapacific.anu.edu.au/blogs/southasiamasala/2012/05/14/the-india-us-china-pakistan-strategic-quadrilateral/>.

⁴ Dan Blumenthal and Michael Mazza, "Why China may want more nuclear weapons," American Enterprise Institute, April 6, 2011. Available at <http://www.aei.org/article/foreign-and-defense-policy/regional/asia/why-china-may-want-more-nuclear-weapons/>.

⁵ "India too has Technology to Intercept, Destroy Rogue Satellites," *Hindu Business Line*, February 23, 2008. Available at <http://www.thehindubusinessline.in/2008/02/23/stories/2008022351582100.htm>; "Ex-ISRO Chief Calls China's A-SAT a Cause for Worry," *Zee News*, September 14, 2009, <http://www.zeenews.com/news563555.html>; Bhargavi Kerur, "Air Chief Marshal PV Naik Wants Missile to Destroy Enemy Satellites," *Daily News & Analysis*, January 23, 2010, http://www.dnaindia.com/bangalore/report_ir-chief-marshal-pv-naik-wants-missiles-to-destroy-enemy-satellites_1338174.

⁶ Bharath Gopaldaswamy and Gaurav Kampani, "Piggybacking Anti-Satellite Technologies on Ballistic Missile Defense: India's Hedge and Demonstrate Approach," April 19, 2011, <http://carnegieendowment.org/2011/04/19/piggybacking-anti-satellite-technologies-on-ballistic-missile-defense-india-s-hedge-and-demonstrate-approach/316?reloadFlag=1>.

⁷ Ajai Shukla, a senior Indian defense correspondent, writes about the origins of Indian BMD plans in the following words: "It began in 1995, after India learned that Pakistan had obtained the M-9 and M-11 ballistic missiles from China. India already had its own nuclear deterrent in place; the Prithvi missile was ready, and the Agni was being tested. But Pakistan was considered unpredictable and, in 1996, the MoD asked its Scientific Advisor APJ Abdul Kalam whether India could quickly develop protection against an incoming Pakistani ballistic missile." Ajai Shukla, "The untold story of India's missile defence," January 30, 2008, <http://www.rediff.com/news/2008/jan/30missile.htm>

⁸ Eric Auner, "Indian Missile Defense Program Advances," *Arms Control Today*, January 15, 2013, https://www.armscontrol.org/act/2013_01-02/Indian-Missile-Defense-Program-Advances; Frank O' Donnell and Yogesh Joshi, "India's Missile Defense: Is the Game Worth the Candle?" August 2, 2013, <http://thediplomat.com/2013/08/indias-missile-defense-is-the-game-worth-the-candle/?allpages=yes>

⁹ Vinod Anand, "The Role of Ballistic Missile Defence in The Emerging India-China Strategic Balance," Vivekananda International Foundation, January 2013, <http://www.vifindia.org/occasionalpaper/2013/the-role-of-ballistic-missile-defence-in-the-emerging-india-china-strategic-balance>.

¹⁰ Hemant Kumar Rout, "India achieves major milestone in its anti-ballistic missile programme," *The New Indian Express*, March 1, 2017, <http://www.newindianexpress.com/nation/2017/mar/01/india-achieves-major-milestone-in-its-anti-ballistic-missile-programme-1576270--1.html>.

¹¹ Happymon Jacob, "Deterrence debates and defence", *The Hindu*, April 21, 2014, <http://www.thehindu.com/opinion/lead/deterrence-debates-and-defence/article5931349.ece>.

¹² Rajesh M. Basur, "Missile Defense: An Indian Perspective," in Chris Gagne and Michael Krepon, eds., *The Impact of Missile Defenses on Southern Asia* (Washington, DC: The Henry L. Stimson Center, June 2001), Available at <http://www.stimson.org/images/uploads/research-pdfs/SABMDBasur.pdf>. See also Ashley Tellis, "The Evolution of U.S.-Indian Ties: Missile Defense in an Emerging Strategic Relationship," *International Security* 30, no. 4 (2006): 113-151.

¹³ "Pakistan conducts successful test of long range missile Ababeel," *Samaa TV*, January 24, 2017, <https://www.samaa.tv/pakistan/2017/01/pakistan-missile-ababeel/>.

¹⁴ Mansoor Ahmed, "Security Doctrines, Technologies and Escalation Ladders: A Pakistani Perspective," Center for Contemporary Conflict, Naval Post Graduate School, September 2011, <https://www.hsdl.org/?abstract&did=709851>.

¹⁵ For more on the 1972 AMB treaty see, "The Anti-Ballistic Missile (ABM) Treaty at a Glance," Arms Control Association, available at <https://www.armscontrol.org/factsheets/abmtreaty>.