



TMD AND NORTHEAST ASIAN SECURITY

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Abstract

The rationale for Theater Missile Defense (TMD) in East Asia is to ensure military cooperation among U.S. allies by reducing the risks of intimidation from ballistic missiles and to secure America's ability to intervene in regional conflicts where the potential use of Weapons of Mass Destruction (WMD) exists. An effective TMD can dissuade countries from expanding their ballistic missile arsenals and thus contribute to non-proliferation and reduction of the number of missiles equipped with WMD.

China and North Korea criticize East Asian TMD as accelerating the arms race and destabilizing the strategic environment in East Asia. However, China and North Korea should realize that it is their missile expansion programs that are the prime movers of the arms race in the region, and TMD is simply a response to such a buildup. Having said that, and since TMD is politically divisive, deployment of TMD in East Asia should proceed in a highly cautious manner, possibly after comprehensive dialogues and discussions among regional states concerning the significance of missile defense.

Text

1. Ballistic Missile Threat in East Asia

The international community today is witnessing an increasing spread in Weapons of Mass Destruction (WMD) and ballistic missiles. In East Asia, Russia, China, and North Korea have deployed ballistic missiles with ranges exceeding 300 kilometers. Apart from Russia, China and North Korea have been increasing the number of their ballistic missiles. China has deployed land-based intermediate-range ballistic missiles, about 70 of which have ranges covering Japan and other Asian countries.(1) China is replacing its CSS-2 ballistic missiles, which are the main body of China's theater missile forces, with more modern and more accurate CSS-5 missiles.(2) North Korea has been making efforts to strengthen not only its short- and medium-range ballistic missiles, which can strike Japan, but also longer-range ones, which may be capable of reaching the continental United States. (3)

Most of the Chinese intermediate-range ballistic missiles are equipped with nuclear weapons. Although China, since its first nuclear explosion in October 1964, has declared unconditional negative security assurances to non-nuclear weapon states,(4) including Japan, the declaration has become increasingly less credible because of China's heavy criticisms against Japanese research on TMD technologies. As for North Korea, its ballistic missile threat today is not formidable in military

terms, because its ballistic missiles are not likely to be armed with nuclear weapons,(5) and ballistic missiles themselves are generally an ineffective delivery vehicle for releasing biological and chemical (BC) agents over a wide area.(6) Nonetheless, taking advantage of the secretiveness in its technology, North Korea may threaten to employ its ballistic missiles under the pretense of being armed with BC weapons to intimidate Japan.

In short, both China and North Korea can utilize their ballistic missiles as weapons of terror or as a means of intimidation on U.S. allies in East Asia to stay away from assisting U.S. military operations in the Taiwan Straits or on the Korean Peninsula. And in the case of Japan this scenario is more likely, since the Chinese and North Korean leadership fully understand that the Japanese public are psychologically more vulnerable to WMD than other nations because of their experiences of nuclear bombings at the end of World War II and the sarin-gas attack in a Tokyo subway by a cult group in 1995.

2. Countermeasures to Ballistic Missile Threat

Aside from a missile defense shield, there are several countermeasures to theater ballistic missiles armed with WMD.(7) First is to attain an Asian version of the Intermediate-range Nuclear Forces (INF) Treaty and/or to strengthen the existing Missile Technology Control Regime (MTCR). To conclude an INF Treaty-type agreement, however, Asian ballistic missile countries with land-based missiles must grow to understand that military advantages brought about by the deployment of ballistic missiles are temporary and those missiles will eventually turn out to be destabilizing war machines if faced with an adversary's ballistic missiles armed with WMD. Neither China, nor India, nor North Korea seems to understand this intrinsic defect of land-based ballistic missiles.

It is true that the MTCR has delayed missile development programs in various countries because of the cumulative weight of multilateral and national export controls. Yet, despite such export control, determined states can build and accumulate indigenous missile technologies over the long run. The burgeoning scientific and technological complex will become immune to MTCR controls. The MTCR can only buy time and is essentially a supply-side approach and thus suffers from an inherent defect: it does not deal with the motivations underlying proliferation. More importantly, the MTCR can do little to roll back existing ballistic missiles.

The second option is diplomacy. In view of the small prospect that arms control measures can eliminate the ballistic missile threat, however, it is very difficult to visualize a diplomatic option removing ballistic missiles. As illustrated by recent overtures to dissuade North Korea from test-firing its ballistic missiles, diplomacy can at most delay and constrain the development and deployment of ballistic missiles.

Preemptive strikes against missile sites in a severe crisis may be a third option. This measure, however, runs the risks violating international law. We have to recall the criticisms thrown against Israel when it launched an air attack against Iraq's nuclear facility in 1981. More importantly, if a preemptive strike fails to entirely eradicate an adversary's missiles, such an action is likely to invite the very response it sought to prevent and, in the worst case, result in an escalation of hostilities.

The fourth option is to rely on U.S. extended deterrence.(8) In the Cold War days, the U.S. provided its allies with powerful deterrence since regional conflicts ran a risk of escalating into a broader U.S.-Soviet armed conflict. However, post-Cold War regional conflicts, even those involving U.S. allies, are now literally regional conflicts for the United States, and American stakes in such regional conflicts are not always crucial to U.S. interests. Additionally, U.S. self-restraint in showing off nuclear weapons as an instrument for deterring regional conflicts, as pronounced in the 1994 "Nuclear Posture Review,"(9) may have generated the impression that American retaliatory options

are now limited only to conventional weapons. Nevertheless, there remains doubt that a threat of conventional retaliation alone, even that of high-tech conventional weapons, is frightening enough to deter a risk-prone adversary. The costs associated with conventional weapons tend to be perceived as manageable. In addition, emphasizing high-tech conventional weapons capabilities may risk promoting development and production of WMD and their delivery means, including ballistic and cruise missiles. North Korea and China, which obviously lack the financial and technological capacity to counter U.S. high-tech weapons, may well find it advantageous to strengthen their WMD to offset U.S. conventional weapons superiority.

3. The Purpose and Security Significance of TMD

As noted previously, if arms control, diplomacy, preemptive strikes, and deterrence are insufficient to deal with the ballistic missile threat, Japan and other non-ballistic missile countries in East Asia have to consider other means of intercepting incoming missiles and warheads. In East Asia, Japan and Taiwan, in their own ways, have been committed to a missile defense program. In May 1993 the U.S. proposed to launch a joint development of TMD with Japan. After about five-years of preliminary studies, in December 1998 the Japanese government decided to enter into a U.S.-Japan joint technology research study to explore the technical feasibility of developing sea-based TMD,(10) the Navy Theater Wide (NTW) defense system. In August 1999, Taiwan's Defense Minister stressed the necessity of introducing a TMD system based on a lower-tier system. Later, the Executive Yuan, or Taiwan's executive branch, decided to develop a system on its own in parallel with purchases from the United States.(11)

A TMD system defending U.S. allies in East Asia (like Japan) and U.S. forces stationed in East Asian countries would have the following security benefits. First, a TMD system can negate hostile states' attempt to discourage U.S. friends and allies from cooperating with U.S. forces through intimidation by ballistic missiles armed with WMD. Second, although adversaries possessing theater ballistic missiles equipped with WMD may threaten or use these weapons to deter or constrain U.S. military operations, a missile shield covering forward-deployed U.S. forces can lower such risks. Third, aside from a marginally effective TMD, a very effective TMD might dissuade ballistic missile countries from expanding their missile forces and thus contribute to the non-proliferation and reduction of ballistic missiles. Fourth, TMD can counter the potential danger of accidental or unauthorized missile launches, which becomes higher with the proliferation of ballistic missiles. Fifth, a TMD system covering Japan and other U.S. friends in East Asia could supplement the U.S. nuclear umbrella. Sixth, as a side-benefit, a TMD system protecting U.S. allies could contribute to non-proliferation of nuclear weapons and ballistic missiles. This is because missile defense, coupled with U.S. extended deterrence, could contribute to reducing a state's desire to acquire nuclear weapons and ballistic missiles. TMD could also enable the U.S. to reduce its reliance on nuclear deterrence in a regional contingency, thereby marginalizing the significance of nuclear weapons. Finally, a TMD system covering Japan can protect U.S. forces in Japan, thereby contributing to efficient operations of the U.S.-Japan alliance that has evolved into a security-related "public good" in the Asia-Pacific region. Furthermore, U.S.-Japan joint technology research on TMD will deepen military technology cooperation between the two countries and thus strengthen the foundation of the U.S.-Japan alliance.

4. Criticisms of the TMD program and Counter-arguments

China and North Korea have been denouncing America's plan to deploy TMD in East Asia and the U.S.-Japan joint research on an NTW defense system. Russia, despite its signing of the 1997 TMD Demarcation Agreements that have paved the way for development and deployment of TMD systems, has joined China and North Korea in their criticism of the NTW defense system. Their criticism can be summarized into the following points.(12) First, an NTW covering Japan will spark an arms race

in East Asia, deteriorating the regional strategic environment, and portends Japan's rise into a military power. Second, an NTW system has the potential to shoot down strategic ballistic missiles and therefore destabilizes the U.S.-Russian and U.S.-Chinese strategic relationships. Since the NTW system has strategic implications, U.S. transfer of missile defense technology to Japan in the context of NTW development would violate U.S. obligations under the Anti-Ballistic Missile (ABM) Treaty. Third, Japanese deployment of an NTW defense system could be used to defend Taiwan. Fourth, supplying a TMD system to Taiwan interferes in China's internal affairs and seriously infringes on China's sovereignty. Fifth, a TMD covering Taiwan would increase Taiwan's false self-confidence and would lead towards Taiwanese calls for independence. Sixth, a TMD sale to Taiwan would be an important step toward the creation of a de facto U.S.-Taiwan military alliance. Seventh, U.S. transfer of missile defense technologies to Japan and Taiwan could violate the MTCR. Finally, TMD is politically divisive, creating a new security demarcation between the U.S., Taiwan, and Japan, on the one hand, and China, North Korea, and possibly Russia, on the other.

However, some of these criticisms are not sufficiently persuasive. In contrast to a ballistic missile defense (BMD) covering a country armed with ballistic missiles equipped with nuclear weapons, TMD covering a country like Japan, which deploys neither ballistic missiles nor WMD, is not likely to destabilize seriously strategic relations with neighboring countries. Contrary to the aforementioned criticism, the absence of TMD might lead to an arms race. For instance, South Korea, while turning down the U.S. offer of a TMD program, is planning to develop longer-range ballistic missiles to neutralize North Korea's missile threat.⁽¹³⁾ In addition, China's missile exercises in the vicinity of Taiwan generated two types of responses in the island: one called for introducing a missile defense, the other advocated the development of offensive missiles capable of hitting China's major cities.⁽¹⁴⁾ China and North Korea should realize that it is their missile expansion programs that are the prime movers of the arms race in this region, and TMD is simply a response to such a buildup. Moreover, regardless of Japan's decision on TMD, China seems to continue to modernize its missile and nuclear forces, and China's missile buildup program will be determined not so much by Japan's deployment of TMD as by other factors, including missile programs in India, Russia, and the United States.

As to the criticism that an NTW system can intercept strategic missiles, we have to recall the 1997 U.S.-Russian TMD Demarcation Agreements. The Second Agreed Statement, defining high-velocity TMD systems including an NTW system, declares five principles that regulate the deployment of the high-velocity TMD system. One of them states that high-velocity TMD systems that pose a realistic threat to strategic missiles of another party to the ABM Treaty cannot be deployed.⁽¹⁵⁾ Furthermore, since the U.S.-Japan joint NTW program is simply at the stage of a technology feasibility study, it is difficult at present to judge if the interceptor missiles have the potential to shoot down strategic ballistic missiles. The same can apply to the allegation of an MTCR violation.

One might add that China and North Korea have not only been strengthening their ballistic missiles but have also been suspected of being exporters of missile-related materials (China) and whole missile systems (North Korea). The very fact that such countries criticize Japan, which does not maintain any ballistic missiles, for conducting research into a missile shield is misguided and unacceptable.

5. Concluding Remarks

A TMD system is the only means present to cope with ballistic missiles actually fired. Passive defenses, such as civil defense, are, in terms of damage-limitation, not effective against attacks by WMD-armed ballistic missiles. They are also politically unpopular as well. As long as there remains a risk in East Asia of deterrence failure and an accidental or unauthorized launch of a ballistic missile armed with WMD, we have to build a TMD system.

However, a TMD system in East Asia, and probably elsewhere as well, is in essence a double-edged sword. Depending on its capability and the country that deploys it, TMD could either reduce a ballistic missile threat and prevent missile proliferation, or further increase missile proliferation. The deployment of TMD in East Asia should proceed in a highly cautious manner, possibly after comprehensive dialogues and discussions concerning the significance of ballistic missiles and missile defense among ballistic missile and non-ballistic missile countries in the region.

Before such comprehensive dialogues and discussions, a couple of words should be brought forward to Asian ballistic missile countries such as China and North Korea. First, the prime movers of the arms race in East Asia are their missile buildups. The TMD program is simply a response to such buildups. If missile-threatened countries, responding to China's and North Korea's ballistic missile buildups, opt for missile development and deployment instead of TMD program, such a move would be even more destabilizing and threatening to China and North Korea. Second, ballistic missile countries in East Asia must understand that the advantages derived from the deployment of ballistic missiles are transitory. It is true that ballistic missiles have certain generic, military advantages: long-range missiles can diminish the protective effects of distance and thus enable the possessor to visualize a variety of war plans; and ballistic missiles carrying WMD can be expected to give rise to a deterrent effect. These military advantages, however, are likely to be neutralized sooner or later by the deployment of ballistic missiles by adversaries. Reactionary deployment not only would negate the aforementioned advantages, but would also bring about hair-trigger strategic instabilities, if survivability of deployed ballistic missiles were not ensured. The key to success for controlling ballistic missiles in East Asia depends on the recognition by regional states that strategic stability ensured by the non-deployment of ballistic missiles is more important and desirable than the short-lived military advantages brought about by ballistic missiles.

Finally, we must remember that the development and possession of missiles, particularly those capable of delivering large payloads, are closely related to the development and possession of WMD. Put another way, the strengthening of efforts to prevent the proliferation of WMD leads to the arrest of the proliferation and use of missiles. This is why the international community must redouble its collective efforts to prevent the proliferation of nuclear and BC weapons.

(The opinions expressed in this essay are the personal views of the author.)

(1) Boueichou [Japan's Defense Agency], Bouei-Hakusho Heisei 12 [White Paper on Defense 2000] (Tokyo: Ministry of Finance Printing Office, 2000), p. 53.

(2) Ibid.

(3) In testimony given before a U.S. Senate committee in September 1999, Robert D. Walpole, U.S. national intelligence officer for strategic and nuclear programs, stated that the Taepo Dong-2 is believed to have potentially the same capability as an ICBM. See "Statement for the Record to the Senate Foreign Relations Committee on Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015," September 16, 1999.

(4) Li Daoyu, "Foreign Policy and Arms Control: The View from China," *Arms Control Today*, Vol. 23, No. 10 (December 1993), pp. 9-10.

(5) We cannot rule out the possibility that North Korea has produced a couple of primitive nuclear explosive devices. However, to assemble a nuclear warhead that can be mounted on a missile, nuclear testing will be required to make a smaller and lighter warhead, and North Korea has not carried out any nuclear weapon tests so far.

(6) A comment by Dr. David C. Wright at the International Symposium on "East Asian Regional Security Futures: Theater Missile Defense Implications," held at the United Nations University in Tokyo, June 24-25, 2000. Also see The International Institute for Strategic Studies, *Strategic Survey 1996/97* (London: Oxford University Press, 1997), p. 17.

(7) For a similar but more detailed discussion on these measures, see Jeffrey A. Isaacson, "North Korean Missile Proliferation Threat on Northeast Asian Security: American Perception and Strategies," *KNDU Review*, vol. 4 (1999), pp. 11-13.

(8) As a basic defense policy Japan has decided not to possess long-range missiles or bombers that can be employed exclusively for the purpose of devastating other countries. This policy deprives Japan of delivery means of its own that could create retaliatory deterrence.

(9) See the last page of the "Results of DoD Nuclear Posture Review," announced on September 22, 1994.

(10) According to the Memorandum of Understanding signed by the U.S. Department of Defense and the Japanese Defense Agency in August 1999, the NTW joint technology research covers the design of four components of interceptor missiles - infrared homing device, kinetic warhead, second-stage propulsion, and nose cone - and trial production of infrared homing device. Japan, the National Institute for Defense Studies, *East Asian Strategic Review 2000* (Tokyo: The National Institute for Defense Studies, 2000), pp. 90-91.

(11) *Ibid.*, pp. 82-83.

(12) See, among others, a special report on TMD and National Missile Defense (NMD) came out in the *Liberation Army Daily* of March 22, 1999; a special article on U.S.-Japan TMD published in the *People's Daily* of April 2, 1999; The Monterey Institute of International Affairs, Center for Nonproliferation Studies, "EANP Factsheets: China's Opposition to US Missile Defense Programs," (<http://cns.miis.edu/cns/projects/ealp/fact/chinamd.htm>), (September 5, 2000); and Howard Diamond, "China Warns U.S. on East Asian Missile Defense Cooperation," *Arms Control Today*, Vol. 29, No. 1 (January/February 1999), p. 27. As for criticisms by North Korea, see The Monterey Institute of International Affairs, *Theater Missile Defense (TMD) in North East Asia: An Annotated Chronology, 1990-Present* (Monterey: Monterey Institute of International Affairs, June 2000), pp. 25, 60. For Russian blame, see, for instance, Alexei Arbatov, "The ABM Treaty and Theater Ballistic Missile Defense," *Stockholm International Peace Research Institute, SIPRI Yearbook 1995: Armaments, Disarmament and International Security* (New York: Oxford University Press, 1995), p. 691 and Arms Control Association, "News Brief," *Arms Control Today*, Vol. 29, No. 5 (July/August 1999), p. 31.

(13) *The International Herald Tribune*, July 13, 2000.

(14) Arthur S. Ding, "China's Concerns About Theater Missile Defense: A Critique," *The Nonproliferation Review*, Vol. 6, No. 4 (Fall 1999), pp. 96-97.

(15) The Second Agreed Statement is based on the following principles: (1) The parties are committed to the ABM Treaty as a cornerstone of strategic stability; (2) Development and deployment of TMD systems are possible, but it should not lead to violation or circumvention of the ABM Treaty; (3) TMD systems that do not pose a realistic threat to strategic nuclear force of another party to the ABM Treaty may be deployed; (4) TMD systems will not be deployed by the parties for use against each other; and (5) The scale of deployment of TMD systems in quantity and geographic scope will be consistent with non-strategic missile programs confronting the party. For the original

wordings, see Arms Control Association, "New START II and ABM Treaty Documents," Arms Control Today, Vol. 27, No. 6 (September 1997), pp. 21-22.

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