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# Missile Issues in East Asia

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**A**lthough the Cold War has been over for a decade, conditions remain that are producing new instabilities—and potential conflicts—in the rapidly changing contemporary world. Missile proliferation issue is a case in point. Missiles, as the most effective delivery vehicles, have the advantages of high velocity, low cost, and great accuracy in a conflict. Few current control or defense measures are adequate to deal with the threat posed by missiles. In particular, when equipped with warheads of mass destruction, missiles can inflict devastating damage on the country attacked.

Against this backdrop, the acquisition and development of missiles and missile technology has become a short cut for many countries to augment their military power, for a variety of purposes. As a result, missiles and missile technology have spread to many parts of the world. A large number of states have decided to devote scarce resources to the effort of building the necessary infrastructure for the development and production of missiles. These states also actively seek technologies, materials, and personnel on the world market to compensate for their domestic shortcomings, and to gain increased expertise. Missile proliferation has become one of the most serious challenges to the peace and stability of the international community.

## **REGIONAL ASPECTS OF MISSILE PROLIFERATION IN EAST ASIA**

As in several other regions of the world, missile proliferation presents significant risks in East Asia. But in general, two observations should be made:

First, the danger of missile proliferation is mostly concentrated in Northeast Asia. In Southeast Asia, there is, as a practical matter, little incentive for the acquisition of missiles. The only exception is perhaps Indonesia, which once developed a satellite program, but was forced to cancel it because of the financial crisis in 1998.

Second, missile proliferation in Northeast Asia has the potential to become widespread. A number of countries have overt or covert programs to develop missiles, and these programs are mutually reinforcing. The resulting situation is volatile and fluid. If there is a breakthrough in the acquisition of ballistic missiles by one country in Northeast Asia, other countries are almost certain to follow.

### **The Korean Peninsula**

Missile proliferation has been a central security issue on the Korean Peninsula over the past decade. Both the Democratic People's Republic of Korea (DPRK) and the Republic of Korea (ROK) are committed to missile development programs.

According to numerous Western reports, the DPRK appears to have achieved the rapid development of its missile program, which started from the modification of Soviet Scud missiles. The DPRK program advanced by creating the medium-range Nodong-1 with foreign assistance, and then developed the longer-range Taepodong-1 and -2 with its own technology. Pyongyang first tested the Taepodong-1 missile as a satellite launcher on August 31, 1998. Although the test failed, Western experts still speculated that the Taepodong-1 has a potential range of approximately 2,000-2,500 kilometers (km) and could serve as the basis for the development of the Taepodong-2 missile, with a range of 4,000-6,000 km. In 1999, however, DPRK leader Kim Jong Il announced a moratorium on the testing of any ballistic missiles, and this moratorium has now been extended to 2003. But this action has done little to mitigate the suspicions of the United States and its allies.

The DPRK has been reported from time to time as being one of the chief exporters of missiles and missile technologies. One report from a South Korean source suggested, for example, that from 1985-2000, the DPRK exported a total of 540 missiles to Middle Eastern countries, including Iran, Iraq, Libya, and Egypt.<sup>2</sup>

It should be noted, however, that these analyses and figures from Western and South Korean sources cited above are quite controversial. Many Chinese and Russian scholars tend to believe that the proliferation risk posed by the DPRK has been exaggerated. In their view, the international community should first of all develop a better grasp of the background and motivations driving the North Korean missile programs. These analysts have argued that if one considers the difficult and "besieged" situation of DPRK, it is not difficult to discern the motivations of the DPRK missile programs, including its export of missiles and missile technologies. From this point of view, the DPRK missile programs are more politically driven and defensive rather than operationally driven and offensive. To put it more specifically, from the perspective of Pyongyang, missiles were perhaps the only means available to deter a possible pre-emptive attack by the combined U.S. and South Korean forces that it so feared. In addition, missiles are the only valuable bargaining chips with which the DPRK can gain potentially significant economic benefits from the West.<sup>3</sup>

South Korea also has an ambitious program to strengthen its missile capability. In January 2001, Seoul

announced that agreement had been reached with the United States to allow the ROK to develop missiles with a range of 300 km and a payload of 500 kilograms (kg). Although these limits match the maximum range permitted by the guidelines of the Missile Technology Control Regime (MTCR), and therefore do not violate them, missiles with a range of 300 km launched from South Korea would be capable of covering most areas of the DPRK. It has been reported that the ROK will deploy Army Tactical Missile System (ATACMS) Block 1A, with a 300 km range and 560 kg payload. These missiles are to be delivered from the United States in April 2004.<sup>4</sup> Moreover, unconfirmed reports suggest that the range of these ATACMS could be increased to 500 km, if their payload were reduced.<sup>5</sup>

### Japan

With the assistance of the United States, Tokyo has made progress in its missile and space launch programs. In 1994, the 165-foot, two-stage H-2 rocket, the first ever made exclusively with Japanese technology, blasted smoothly into orbit. Capable of launching payloads of two metric tons into orbit, the H-2 could easily be the forerunner of a Japanese intercontinental ballistic missile (ICBM), should Japan decide to build one, since all the technology is Japanese, and Washington has no authority to slow development by withholding licenses. It has been reported that in the technological design of H-2, the diameter of the H-2 solid booster was the same as that of the U.S. Minuteman III ICBM, while the diameter of the improved H-2 solid booster was also the same as the U.S. MX ICBM.<sup>6</sup> What is more puzzling is that the development and production costs for the H-2, as well as its huge launching expenses, are hard to justify on commercial grounds. Nevertheless, Japan is proceeding with the development of the H-2A. In addition, it is widely acknowledged that Japan could develop a military nuclear program if it chose to do so. Thus, if Tokyo should decide to develop global strategic capabilities in the future, two critical elements of a diversified delivery system—long-range land-based booster rockets and nuclear submarines—would be readily available.<sup>7</sup>

It is, therefore, most unfortunate that the United States has dragged Japan into the joint development of missile defense systems. Such joint development could be viewed as a violation of the principles of the MTCR. More importantly, the joint development program has given Japan

a new venue through which to acquire technologies related to weapons of mass destruction.

The motivation for Japan acquiring sophisticated missile technology is simple. It is obvious to many observers that Japan has not resigned itself to remaining only an economic power. Tokyo is endeavoring to become a major political and military power as well. Developing an ICBM and even a nuclear capability could be seen as a symbol of that status. Japanese ambitions have already alarmed many East Asian countries. Such ambitions are particularly worrisome to many countries in East Asia, since Japan is still reluctant to acknowledge its responsibility for the Second World War. Against this background, Tokyo's missile program is bound to generate deep suspicion from its neighboring countries.

### Taiwan

Taiwan is not a country. It is part of China, but unfortunately, owing to the interference of outside forces, Taiwan has remained separated from China. The issue has become increasingly nasty since the end of the Cold War. As the United States and Japan cast a more suspicious eye towards the development of China and its future policy orientation, they have increased their support for Taiwan's resistance to the mainland's effort for a peaceful unification. One reflection of this trend has been the expansion of arms sales to Taiwan.<sup>8</sup> These arms sales have encouraged the pro-independence forces in Taiwan, which are seeking a permanent separation from China. Furthermore, the Taiwan authorities have already expressed their great interest in participating in U.S. missile defense systems. Washington has stressed that it will definitely consider Taiwan's participation if the mainland increases its military pressure on the island.<sup>9</sup> Taiwan also has its own plans for missile development and deployment, such as the Tien Chi missile, with a 300 km range and 500 kg payload, which is being developed using domestic technology.<sup>10</sup>

The development of the situation has forced the mainland to take corresponding measures to head off a potentially permanent split. These include the possible use of force, if necessary, although Beijing has not given up its efforts for peaceful unification on the basis of the formula of "one country, two systems." Nevertheless, the situation is becoming increasingly volatile and dangerous.

There is a view, however, that the escalation across the Taiwan Strait is mainly driven by the growing deployment of short-range ballistic missiles along the coastal areas that

face Taiwan by the mainland of China. From a Chinese perspective, this argument is far-fetched. If one looks back at history, ever since China started opening up to the world in the late 1970s, Beijing has consistently pursued a peaceful reunification policy towards Taiwan. To demonstrate the goodwill and sincerity of the mainland of China, during the 1980s and 1990s, Beijing took a series of measures aimed at reducing tension and building confidence and trust across the strait. These measures included dismantling the Fujian command, which would have been responsible for operations against Taiwan during a military conflict; handing over to the local government a number of military bases; and substantially reducing the military presence in the coastal area. Unfortunately, these goodwill measures have never been reciprocated in kind. It was not until the United States started changing its policy by dramatically enhancing its official relations with Taiwan, and a tendency toward increasing separation on the island emerged, that Beijing was forced to take measures in order to head off the danger of losing its territory. The deployment of ballistic missiles is thus one of the preventive measures for the mainland to safeguard its sovereignty and territorial integrity. However, if the United States returns to its previous China policy, based on its commitment under the three joint communiqués with China, and the danger of separation by Taiwan is reduced, there will be no need for Beijing to deploy any missiles in its coastal area any more.

### U.S. BMD (NMD/TMD) PROGRAMS

The United States has a long history of interest in Ballistic Missile Defense (BMD). Current U.S. missile defense plans call for building a multiple-layered defense system, including land-, sea-, air-, and space-based components. The development of this system will probably begin with a land-based system intended to defend the entire territory of the United States against an attack by a small number of ICBMs carrying nuclear, chemical, or biological warheads. The attack could come either from one of the so-called "rogue" states, or from an accidental or unauthorized launch by Russia or China. The planned architecture for this initial deployment envisions a land-based non-nuclear missile defense system employing silo-based, hit-to-kill interceptors and incorporating both orbiting and terrestrial early warning and battle management systems.

Shorter-range U.S. missile defense systems, designed to intercept short- and medium-range ballistic missiles, are

a sequential development from surface-to-air (SAM) missile systems, first in the form of the Hawk system during 1960s, and then the versions of the Patriot Advanced Capability-1 (PAC-1) and PAC-2 in the 1980s. Thanks to the development of new high-tech systems, Washington anticipates building a three-layer Theater Missile Defense (TMD) system with a fairly satisfactory kill probability, namely, a combination of a lower-tier layer, an upper-tier layer, and a boost-phase layer during the first decade of the present century.

Since President Bush took office, Washington has decided to integrate the two programs formerly known as National Missile Defense (NMD) and TMD into one, renamed Missile Defense (MD). But the separate development of NMD and TMD elements still continues. As far as the Asia Pacific region goes, the core TMD programs currently funded include no fewer than four new theater-level systems. These systems are divided into lower- and upper-tier systems, with the Navy and Army having separate requirements for each.

Lower-tier systems are designed to intercept ballistic missiles of up to about 1,000 km in range in the latter stage of their flight, i.e. within the atmosphere. They are thus able to protect only relatively small areas (“footprints”) a few tens of km across, but importantly, should also be able to intercept air-breathing delivery vehicles (bombers and cruise missiles). This category includes the Army PAC-3 system and the Navy Area Defense (NAD). Upper-tier systems are designed to intercept missiles with ranges of several thousand km (i.e., outside the atmosphere), thus defending areas several hundred kilometers across. This category includes the Army Theater High Altitude Area Defense (THAAD) and the Navy Theater Wide Defense (NTWD).

Despite U.S. insistence that these systems are strictly defensive, the international community has been greatly concerned with these programs. Many regard them as evidence of a U.S. unilateralist drive to achieve military superiority. Moreover, the U.S. deployment of missile defenses will inevitably result in an unnecessary arms race, as other countries will likely take countermeasures. Some commentators have argued that U.S. TMD systems have the potential to hinder the improvement of U.S. and South Korean relations with North Korea. Some have also contended that as the development and deployment of these systems are themselves an act of vertical proliferation, they may even jeopardize the nuclear nonproliferation regime.

It is ironic that the nonproliferation regime, which the United States took so much effort with others to build up, may be unraveled by its own actions. Efforts to strengthen nonproliferation in Northeast Asia will also experience a serious setback if the United States pushes ahead with its missile defense plans.

## **TWO CONTRASTING APPROACHES TO NONPROLIFERATION IN EAST ASIA**

Nonproliferation of missiles in East Asia is in the interest of all the countries in the Asian-Pacific region. However, recent developments have shown that there are two approaches to dealing with the missile issue: the first, a unilateral, confrontational approach; the other, a multilateral, cooperative approach.

Nonproliferation is at its core a political issue. The confrontational approach, based on coercion by military pressure, will not prove constructive, and will most probably backfire and undermine international security. The fundamental way to approach the issue, therefore, should be to reduce tensions in international relations and develop a more propitious context in which all countries are free from major pressure of outside threats. In these conditions, many countries could terminate their missile and nuclear programs. It is on the basis of this approach that China and the majority of the international community calls for an international cooperative approach to the nonproliferation issue. The world is becoming smaller and smaller. All nations increasingly share more common interests and face an increasing number of common threats. There is a strong basis for international cooperation to address these common threats.

In order to realize a multilateral cooperative approach to missile proliferation in East Asia, some vital issues deserve special attention:

First of all, the major powers need to further improve their bilateral relations. These relations constitute a valuable framework for sustained peace and stability in the region. However, although all the major powers have working relations with each other, deep-rooted suspicion and mistrust still prevail. In the current situation, the United States has a particular obligation to provide assurance by deeds—not just by words—that its military and missile defense program is defensive and will not threaten the security of other states. Similarly, Japan should reaffirm its commitment to adhere to its security policy based on its peace constitution, and refrain from developing mili-

tary strength beyond its defensive needs. Such moves by the United States and Japan would likely generate a positive response from other major countries in East Asia. Then there would be a favorable atmosphere for further international efforts to stem missile proliferation in the region.

Secondly, there should be a continuous effort to reduce regional tension in Northeast Asia. In this area, the primary source of the tension is the existence of the two divided nations, Korea and China. Reducing hostility between the divided parts of these countries, and creating more benign conditions for the normalization of contacts and eventual unification is the fundamental task that must be addressed in order to solve the issue of the missile proliferation on both the Korean Peninsula and across the Taiwan Strait.

On the Korean Peninsula, although progress on missile proliferation is currently at a standstill, the situation is not entirely bleak. After the shifting of position by the Bush administration dealt a painful setback to the detente created by the North and South Korean leadership in 2000, it seems now that Seoul and Pyongyang are again rebuilding momentum for normalizing relations. Washington is also clearly willing to resume its dialogue with the DPRK. Provided that this trend continues, there is hope for the further relaxation of tensions, thereby providing greater incentives for missile nonproliferation.

With regard to the missile issue across the Taiwan Strait, the major responsibility lies on the shoulders of Washington. The United States must honor its obligations under

the three joint communiqués and abide by the “one China” policy. If this were the case, it would not be difficult to solve the missile proliferation issue.

Third, the United States should be prudent in developing and deploying the MD system in East Asia. The development and deployment of MD systems will exert a particularly negative impact on regional security and stability, probably triggering a vicious chain of actions in the region, and thereby seriously obstructing international efforts to promote missile nonproliferation.

<sup>1</sup> The views expressed in this paper are solely those of the author and do not necessarily represent those of the National Defense University or any other organization.

<sup>2</sup> *International Herald Tribune*, April 7-8, 2001.

<sup>3</sup> See, for example, Leon V. Sigal, “Negotiating an End to North Korea’s Missile-Making,” *Arms Control Today* 30, (June 2000), pp. 1-2, <<http://www.armscontrol.org/ACT>>.

<sup>4</sup> Arms Control Association, “Worldwide Ballistic Missile Inventories,” April 2002, <<http://www.armscontrol.org>>.

<sup>5</sup> “New Missile Development Range for South Korea,” *Disarmament Diplomacy* No. 64 (February 2001), p. 62.

<sup>6</sup> Qian Zhenye, “Reflections on the Development of Japan’s Space Technology,” (in Chinese) *Studies in International Technology and Economy* (published by the Institute of International Technology and Economy, Development Research Center of the State Council, China) 1 (1998), p. 4.

<sup>7</sup> For details about the Japanese nuclear power program, see Kent E. Calder, *Asia’s Deadly Triangle*, (London: Nicholas Brealey Publishing, 1997), pp. 80-81

<sup>8</sup> From 1994-1998, for example, Taiwan was the largest arms importer in the world. It imported arms and equipment worth \$13.3 billion, accounting for 11.9 percent of total world arms imports during the same period. See *United Morning Post* (Singapore), January 18, 2001.

<sup>9</sup> *Washington Times*, July 18, 2001.

<sup>10</sup> Arms Control Association, “Worldwide Ballistic Missile Inventories,” April 2000, <<http://www.armscontrol.org/>>.