THAAD Deployment in South Korea and Its Impact on Northeast Asia[1]

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2015. 7. 30

While the Obama administration and the U.S. military are applying intense pressure on the South Korean government, politicians, the military, etc., demanding the deployment of the THAAD system in South Korea, the South Korean Defense Ministry is reportedly in the process of reviewing the matter prior to U.S.-South Korea working-level talks.
In addition, the commander of the U.S. Strategic Command recently visited South Korea. As he is the highest-ranking U.S. commanding officer in relation to the THAAD system, it is assumed that his visit was about fine-tuning remaining issues in relation to THAAD deployment, as well as the integration and command and control of the U.S.-South Korean missile defense (MD) system.

THAAD deployment in Korea will bring about not only changes in South Korea's MD system, but also a fundamental transformation of the U.S.- and Japanese-led MD system in Northeast Asia and cause a tsunami-like wave of change, with detrimental impacts on the overall state of affairs on the Korean peninsula as well as in Northeast Asia as a whole.

[1] This presentation is a revised and updated version of a presentation originally given in New York City on April 25, 2015 at a workshop hosted by Nodutdol for Korean Community Development, Global Network against Weapons and Nuclear Power in Space, and Solidarity for Peace and Reunification in Korea at the Peace and Planet Conference (a gathering of NGOs and civil society organizations) ahead of the 9th UN Nuclear Non-proliferation Review Conference.

I would like to introduce the debate within South Korea regarding the current status of the South Korean MD system construction and THAAD deployment, and briefly discuss the connection between THAAD deployment and the U.S.-Japan-South Korea trilateral MD system, as well as its impact on the political state of affairs on the Korean peninsula and in Northeast Asia. In particular, I will point out how this debate relates to the exercise of collective self-defense by the Japanese Self-Defense Forces (JSDF) and to the revision of the Guidelines for U.S.-Japan Defense Cooperation.

1. The Current Status of South Korea's MD System Construction

South Korea currently possesses 2 PAC-II battalions (8 batteries, 48 launchers), procured from Germany, and is in the process of upgrading to PAC-III. South Korea also plans to directly procure PAC-Ⅲ from the U.S.

South Korea also possesses 3 Aegis destroyers, but they are not equipped with interceptor missiles. It plans to introduce 3 additional Aegis destroyers between 2022 and 2028.

The U.S. Forces Korea (USFK)'s deployment of the THAAD system is becoming a fait accompli, and the South Korean forces' acquisition of the THAAD system and the SM-3 and SM-6 interceptor missiles is being heard about.

Meanwhile, South Korea is in the process of developing M-SAM and L-SAM. The operational deployment of M-SAM is projected for 2018-2019, and L-SAM for 2023-2024.

In terms of sensors, South Korea currently operates the Aegis SPY-1D radar with a detection range of 1000 km, along with 2 (Super) Green Pine early warning radars with detection ranges of 500 km for Block A and over 900 km for Block B (Super).

South Korea is planning to construct an AMD Cell by 2015 and interface it with the USFK's TMO Cell. Meanwhile, the U.S. Forces Korea possess 48 PAC-III launchers (1 brigade, 2 battalions) in Suwon, Osan, Gunsan, and Daegu.

2. THAAD Deployment in South Korea is Becoming a Fait Accompli with U.S.-led MD Construction in Northeast Asia

① THAAD is Not Aimed at North Korea, but at China

The THAAD system's effectiveness in intercepting North Korean ballistic missiles is extremely limited. That is because most of North Korea's ballistic missiles, with their short range and low apogee altitude, fly at a lower altitude than the THAAD intercept altitude.

The KN-02, with a range of 120 km, has an apogee altitude that is below the THAAD system's intercept altitude of 40-150 km.

If launched at a lower angle of fire, the Scud B, with an apogee altitude of 90 km, is also capable of evading the THAAD system's intercept altitude.

If launched from north of Pyeongyang along a depressed trajectory, the Scud C, with an apogee altitude of 150 km, can also evade the THAAD system's intercept altitude as it targets South Korea's capital and central provinces.

The ineffectiveness of the THAAD system in defending South Korea has been confirmed in a U.S. Department of Defense report to Congress (1999), as well as in a recent internal document of the South Korean Defense Ministry (2013).

Therefore it can only be concluded that THAAD deployment in South Korea is for the purpose of intercepting China's mid-range ballistic missiles aimed at the USFK's or ROK's bases rather than intercepting North Korea's ballistic missiles.

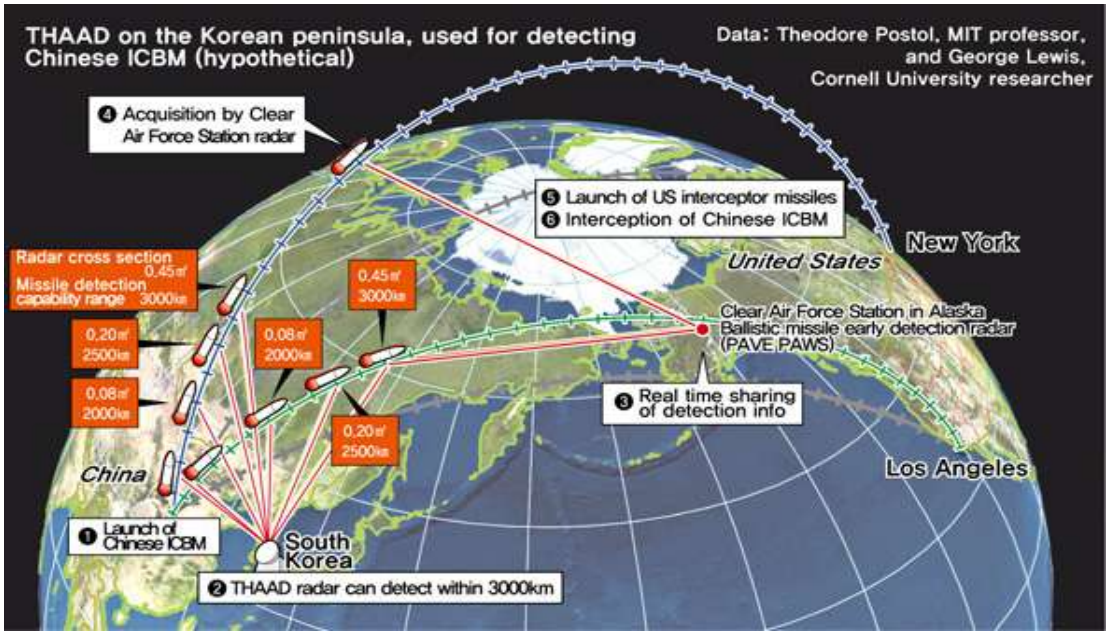
Hence, some U.S. and South Korean officials point to Rodong missile as the reason for the need for THAAD deployment. But the likelihood that North Korea would attack the South with its Rodong missile is virtually zero. With a range of over 1300 km, the Rodong missile is a weapon system designed to counter Japan, U.S. Forces Japan, or U.S. reinforcements in the case of an emergency on the Korean peninsula.

Therefore, it is highly unlikely that North Korea would forgo the use of its short-range ballistic missiles, such as Scud B or C, which are much better suited for an attack on the South Korea, and choose to strike with a Rodong missile.

If North Korea were to attack the South with a Rodong missile, it would have to launch it at either a higher or lower angle of fire, but raising the angle of fire slows down its speed and lengthens its flight time, making it easier to intercept. Flying posture control becomes more difficult, if the angle of fire is raised, thereby diminishing its accuracy.
Likewise, lowering the angle of fire, though difficult to detect, also slows down its speed and lengthens its flight time, making it easier to intercept. Flying posture control also becomes more difficult, if the angle of fire is lowered, thereby diminishing its accuracy in this case as well.

With a detection range of 2000 km, the THAAD system's AN/TPY-2 radar (FBM) is capable of early detection of ballistic missiles from bases in northeast and central China. Therefore, the THAAD radar can detect China's mid- to long-range ballistic missiles aimed at the United States and Japan and provide early warning to the U.S.-Japan intercept system.
According to the U.S. experts' analysis, as the Hankyoreh of June 1, 2015 reported, even if the AN/TPY-2 radar(forward-based moder) is installed oriented toward North Korea, the radar can detect Chinese ICBMs headed towards the U.S. within a 3,000~4,000 km radius of South Korea. It seems that this tracking information will then be received by the AN/TPY-2 radar in Shariki, Japan and the Cobra Dane radar in Shemya, Alaska.[2]
This type of early warning capacity is what U.S. and Japanese government and military officials are most interested in.

[2] http://www.mda.mil/system/sensors.html



② Potential Sites for THAAD Deployment in South Korea and Anticipated Problems

The U.S. Forces Korea are considering five cities, including Pyeongtaek, Wonju, Daegu, and Busan, as potential sites for THAAD deployment. But as U.S. bases in Pyeongtaek and other cities under consideration are in densely populated urban areas, the impact of deployment will likely be seriously detrimental. It will be hard to find a site large enough to guarantee the 6 km of operational safe distance required for THAAD deployment.

Even if a new site is considered, it will not be easy to find an area where they can avoid problems related to environment, housing, public health, and public transportation, as well as restricted flight zones. The SAEMANGEUM reclaimed land at Gunsan, Jun Buk Province, is presumed to be a potential site for THAAD deployment. It is along the shore in the Yellow Sea, facing China.

③ The Change in the Character of South Korea's MD, based on THAAD Deployment in South Korea

THAAD deployment in South Korea would expand the USFK's current MD system from a terminal lower-tier intercept system to a terminal upper-tier intercept system. By linking with the South Korean MD System, it would also indirectly change the nature of the South Korean MD system, a terminal lower-tier intercept system, to a terminal high-tier intercept system.
The U.S. and South Korean governments are also reportedly considering the acquisition of the THAAD system by the South Korean military. If the South Korean military directly deploys the THAAD system, then its terminal lower-tier intercept system would expand to a terminal upper-tier intercept system.

④ The Significance of THAAD Deployment in South Korea in the Context of U.S. Missile Defense in Northeast Asia

THAAD deployment in South Korea would bring the U.S.-led MD system in Northeast Asia closer to completion.
In terms of intelligence operations, THAAD deployment in South Korea will drastically reduce blind spots in the existing U.S. detection and tracking system and establish an early warning system against China’s ballistic missiles.
In terms of intercept operations, along with the PAC-III, it would also create a multi-layered MD system to defend against Chinese ballistic missiles aimed at USFK bases.
THAAD deployment in South Korea means that South Korea would become a U.S. MD outpost base for intelligence operations and intercept operations against China.

⑤ The U.S.-Japan-South Korea Military Information-Sharing Arrangement for the Construction of the Northeast Asia MD System

The signing of the U.S.-Japan-South Korea military information-sharing arrangement is the key to constructing the Northeast Asia MD system.

This U.S.-Japan-South Korea military information-sharing arrangement is a revised version of the General Security of Military Information Agreement (GSOMIA) between Japan and South Korea, which the Lee Myung-bak administration failed to conclude during closed-door negotiations in 2012.

Compared to the GSOMIA, the U.S.-Japan-South Korea military information-sharing arrangement may lack binding power under international law, but it is no different in the sense that it links the parties' MD systems.

The U.S. and Japan are plotting once again the signing of the General Security of Military Information Agreement between Japan and South Korea.

By linking the MD systems of Japan and South Korea, the U.S.-Japan-South Korea military information-sharing arrangement and the South Korea-Japan GSOMIA unify the U.S.-Japan-South Korea MD systems, thereby completing the Northeast Asia MD system.

3. U.S.-Japan-South Korea Combined MD Exercises and the Development of an MD Operational Plan and the Coordination of the Command and Control Structure

① U.S.-Japan-South Korea Combined MD Exercises

Every 2 years, the U.S. Strategic Command conducts "Nimble Titan" multilateral MD exercises, which include Japan, Australia, countries of the European Union, and South Korea as participants.

Every year, the United States and Japan conduct "Keen Edge", a BMD command exercise. Japan's Maritime Self-Defense Force is the only military force that has jointly trained with the United States armed forces in an exercise that is not a simulation but rather a kinetic training based-BMD exercise.

In addition, since 2012, the United States, Japan, and South Korea have held combined MD exercises called "Pacific Dragon".[3]

② The Development of an MD Operational Plan and the Possibility of Change in the Command Structure between the United States and South Korea

In 2013, the South Korean and U.S. militaries adopted the so-called "tailored deterrence strategy", which features preemptive strikes against North Korea, and the South Korean military plans to establish the so-called "kill-chain" by 2022 to carry out the exactly these preemptive strikes.

Based on this, the two countries reached an agreement in 2014 on "The Concepts and Principles of ROK-U.S. Alliance Comprehensive Counter-Missile Operations", and they have plans to develop by 2015 an operational plan (OPLAN) that mobilizes all of the U.S. MD assets in the world.

This means that all of the U.S. MD assets in the world that South Korea does not possess will be mobilized in a U.S.-South Korea combined operational plan. In addition, this means that what used to be an operational plan to defend South Korea from the North would be expanded to become, in effect, an operational plan against China, at least when it comes to MD operations.

Mobilizing all of the U.S. MD assets in an ROK-U.S. combined OPLAN against North Korea and integrating these with South Korea's MD assets means that South Korea's MD system will become subordinate to the U.S. MD system, and South Korea's MD operational command will be under direct U.S. operational command, in accordance with U.S. strategic interests.

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[3] Directly quoted from U.S. Strategic Command, "NIMBLE TITAN Shaping Future Missile Defense", 2012. 5. 31; and Statement of Madelyn Creedon, Assistant Secretary of Defense for Global Strategic Affairs before the House Armed Services Committee, May 8, 2013

In the case of an emergency on the Korean peninsula, the United States, which already has wartime operational control over South Korean forces, would also exercise control over ballistic missile detection and interception against North Korea and China. While its capability to intercept North Korea's short-range ballistic missiles remains so limited, this increases the probability of South Korean MD assets being committed to the defense of the United States, Japan, and U.S. Forces Japan, as well as to the support of Japan's exercise of the right of collective self-defense.

In this way, the fact that the parties agreed to mobilize the U.S. MD assets outside of South Korea in an ROK-U.S. combined OPLAN against North Korea means that potential conflicts between the two countries over operational command of South Korea's MD assets have been resolved according to U.S. operational interests.

On April 16, 2015, U.S. and South Korean military officials agreed to create a "Deterrence Strategic Committee" to lead in the development of a combined MD operational plan, including the final definition of the concept of 4D (Detect-Defense-Disrupt-Destroy).

③ Combined MD Operations and the Command Structure between the United States and Japan

Japanese Self-Defense Forces have also established a preemptive strike strategy and operational plan against North Korea and are in the process of building the necessary military strength for implementation. This means that it can be combined with the U.S.-South Korean preemptive strike operational plan, and if necessary, the three countries -- South Korea, the United States, and Japan -- can jointly carry out preemptive strike operations against North Korea.

Based on information produced through their various sensors, the United States and Japan carry out joint operations from their joint operation command center at the Yokota Air Base outside Tokyo. Based on the acquired information, the joint operation command center

quickly decides which country has the responsibility for MD interception. In relation to MD, it can be said the United States and Japan have built a true joint command relationship.

4. The Formation of the South Korea-U.S.-Japan Trilateral MD System and the Military Alliance in Northeast Asia

① The relationship between Japan's exercise of the right of collective self-defense and the South Korea-U.S.-Japan trilateral MD system

One of the 8 key scenarios mentioned by the Abe administration for its exercise of the right to collective self-defense is that Japan would intercept ballistic missiles aimed at the United States, U.S. bases, or U.S. naval ships, or (preemptively) strike the naval vessel or base from which the missiles originate.

For this, early detection of ballistic missiles fired from North Korea or China is pivotal, and this would be premised on South Korea, the United States, and Japan sharing information about ballistic missiles from North Korea and/or China and forming a trilateral MD.

After revision of the U.S.-Japan New Guidelines (April 27, 2015), anti-ballistic missile intelligence activity as well as training and operations between the United States and the JSDF have become more regular and broader in scope.

By signing the U.S.-Japan-South Korea military information-sharing arrangement and becoming a part of the trilateral MD axis, South Korea effectively assumes a supporting role in the exercise of collective self-defense by the Japanese Self-Defense Forces, who are seeking to eventually re-invade the Korean peninsula.

② Formation of the South Korea-U.S.-Japan military alliance based on the construction of the trilateral MD system and military subjugation of South Korea to Japan

The construction of a trilateral MD system among South Korea, the U.S., and Japan means building a trilateral military alliance. The three countries will upgrade their combined MD training exercises, such as "Pacific Dragon", and intensify maritime interdiction trainings, such as the Proliferation Security Initiative (PSI) against North Korea. This will expand the military relationship between Japan and South Korea in the areas of operations and logistics assistance and advance the trilateral relationship to a (quasi-) military alliance. The U.S. and Japan are also pushing for the signing of the Acquisition and Cross-Servicing Agreement (ACSA).

Meanwhile, should South Korea acquire interceptor missiles, such as the SM-3 Block IA or SM-3 Block IIA, to install on Aegis destroyers, it will most likely procure them from Japan, making South Korea dependent on Japan in the areas of logistics and maintenance, such as the import of F-35 parts and depot maintenance.

The construction of the South Korea-Japan MD and military alliance raises the possibility that South Korea will become a subordinate partner to Japan and under Japanese control across the board in the areas of information, operations, and logistics. Furthermore, we cannot rule out the possibility that, with Japan's exercise of its right to collective self-defense, South Korea could be partially under the control of Japan's tactical operations in a South Korea-U.S.-Japan combined operation against North Korea and/or China.

5. NATO's Expansion to the Asia-Pacific Region and Its Merger with the South Korea-US-Japan-Australia Military Alliance

The South Korea-U.S.-Japan trilateral military alliance, combined with the U.S.-Japan-Australia (quasi-) military alliance, forms a multilateral alliance system in the Asia-Pacific region among South Korea, United States, Japan, and Australia.

Meanwhile, the South Korea-U.S.-Japan trilateral alliance will merge with NATO, which already expanded to the Asia-Pacific region when countries in the region joined it through individual partnerships -- South Korea in 2012, Australia in 2013, and Japan in 2014.

The U.S.-led construction of a global MD system and military alliance is aimed at creating a new Cold-War type of system to contain China and Russia. As a result, a structure of Cold War-like military confrontation between the U.S.-Japan-South Korea-Australia alliance on the one hand, and the North Korea-China-Russia triangle on the other, is in the process of formation in Northeast Asia.

The Vice-Foreign Ministers' Conference among South Korea, the United States, and Japan, held in Washington D.C. on April 16, 2015, and the fourth International Security Conference, centered around North Korea, China, and Russia and held in Moscow, symbolically represent the rising military tension based on the formation of MD systems and military alliances in the Asia-Pacific region.

With the revision of the Guidelines for U.S.-Japan Defense Cooperation, the exercise of the right of collective self-defense is entering the implementation stage. To further support this, South Korea, the United States, and Japan are accelerating THAAD deployment in South Korea and the construction of a trilateral MD system.

There is a confrontation between the United States and China, which is centered around the East and South China Seas. The United States is involving the Japanese Self-Defense Forces, in order to maintain control over sea lanes, which has historically guaranteed American hegemony in East Asia. China aims to challenge this hegemony.

Since the Korean peninsula and Northeast Asia are still stuck in a Cold-War type of confrontation, this situation has the most volatile potential to turn an accidental clash into a hot war.