

THAAD: Missile Defense or Diplomatic Challenge?¹

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Abstract

The date 8 July 2016 is a momentous one for Northeast Asian security affairs. It was when South Korea's Ministry of National Defense (MND) announced the government's decision to allow US deployment of the Terminal High Altitude Area Defense (THAAD) system on Korean soil. This news reverberated around the world, as the implications of deploying THAAD go beyond the already dangerous Korean peninsula and impact on relations between the United States and China. This report discusses THAAD as not only a missile defense system but also as a diplomatic challenge.

What is THAAD and what led to its deployment?

Lockheed Martin's Terminal High Altitude Area Defense system is described by the Missile Defense Agency of the US Department of Defense (2016) as having the "capability to intercept and destroy ballistic missiles inside or outside the atmosphere during their final, or terminal, phase of flight". Its deployment in South Korea by the end of 2017 was announced in response to North Korea's nuclear and missile tests.

Early in January 2016, the Democratic People's Republic of Korea (DPRK, North Korea) conducted the fourth of its five nuclear tests (the fifth came seven months later) and, as a result, the Republic of Korea (ROK, South Korea) suspended operations at a jointly run industrial park in North Korea. This industrial park has been described the "last remaining points of peaceful engagement between North and South Korea and was often seen as an indicator of relations between them." (BBC News, 2016). The suspension led to heightened tension on the Korean peninsula and widespread public anxiety. When on 8 July Seoul confirmed THAAD's deployment as a "vital system in response to North's continued development of missile technology in contravention of six United Nations Security Council Resolutions" (Panda, 2016), there was a great deal of media speculation around the world as to its underlying purpose – including the view from Beijing that THAAD's deployment was meant to "help Washington to expand its military power in the region" (Jung, 2016; see also *People's Daily* editorial, 3 August 2016). In other words, it could be a strategic move on

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Washington's part to strengthen its position in the region vis-à-vis China. Washington's apologists maintain that Beijing's "true objective" in denouncing THAAD's deployment in the ROK "is preventing improvement in allied defensive capabilities and multilateral cooperation" (Klingner, 2016).

Does THAAD offer more problems than protection?

Theoretically, the deployment of THAAD creates a defense area of 200km radius, which means it covers more than half of South Korea's territory. Initially it was going to be located the Seongsan anti-aircraft missile base in Seongju, 296km southeast of Seoul, but was changed to another site in Seongju, a golf course – the Lotte Skyhill Country Club, 18 km north of the Seongju County center – due to protests from residents fearing for their health. Though the new site is more isolated from population areas, those in the vicinity were not happy. Residents from the adjacent town of Gimcheon had taken up the cause of protest. Indeed, as of October 2016, the debate in South Korea as to the wisdom of THAAD deployment remains as vigorous as ever (see Lee, J. Oct 2016).

Health concerns are one of a number of negative issues arising from the deployment. First, THAAD while offering a protective defense layer is itself a potential health hazard. In 2014, Japan deployed the "Army Navy/Transportable Radar Surveillance (AN/TPY-2) radar (radar system for THAAD)" in Kyogamisaki to enhance its ballistic missile defense system (U.S. Department of Defense, 2014). The citizens of Kyogamisaki, however, reported a serious noise disturbance which, along with the electromagnetic waves (EM) from the radar, caused many to suffer from headaches and nausea (JTBC News).

To counter this fear, South Korean media were invited to Guam where THAAD is deployed "for independent tests" that showed "levels of the electromagnetic waves emanating from the radar revealed the system operates at an intensity far safer than required by Korean law"; moreover, Guam's representative said there were "no signs of environmental impact nor any noise complaints from the defense system's deployment on the island" (Klingner, 2016). Yet this was not the end of the matter, as the reporters were given the results of the tests but not the input measures. This was deemed important by critics because radars can operate at different settings and angles: "Varying these factors would produce entirely different results" (Elich, 2016).

The second issue concerns the effectiveness and necessity of THAAD. Jong-Dae Kim, who is a member of the national assembly, as well as a military expert, observed that the THAAD testing in the United States was not always successful and the system was not widely deployed there. He also questioned the necessity of a system that defends against missiles coming from high altitude, saying that if the North was to hit Seoul, it did not need to fire a ballistic missile that goes into space and re-enters just across the border. Currently, there are Patriot PAC-2 missile defense systems deployed in ROK. These are intended for low altitude

missiles that are more likely to be used by the North given the short distance between two adversaries; hence the PAC-3 is enough to defend the South (Kwon, 2016).

The counter-argument here is that THAAD is necessary because the “advanced missile defense shield would provide a more reliable layered security at a greater range and higher altitude than existing or planned South Korean systems and enable multiple attempted shots at incoming missiles” and that targeting would not be only for Seoul but “would encompass all of South Korea, including the port of Busan where U.S. reinforcement forces would land” (Klingner, 2016). Elich (2016) disagrees, saying:

The missiles in a THAAD battery are designed to counter incoming ballistic missiles at an altitude ranging from 40 to 150 kilometers. Given North Korea’s proximity, few, if any, missiles fired by the North would attain such a height, given that the point of a high altitude ballistic missile is to maximize distance . . . North Korea would rely on its long-range artillery, cruise missiles, and short-range ballistic missiles, flying at an altitude well below THAAD’s range.

As to THAAD’s reliability and deployment in the U.S., according to *GlobalSecurity.org* (2016):

By mid-2016 Fort Bliss, Texas hosted two THAAD batteries; Guam hosted another battery intended to protect against the North Korean missile threat to the island and allies in the Asia-Pacific . . . The Army certified two of six planned THAAD batteries in fiscal year 2012 for initial operational use. The Army certified that the first two THAAD batteries are safe, suitable, and supportable for Army soldiers to operate. However, the Army will not accept full materiel release of the batteries until additional criteria are completed by MDA. Conditional Materiel Release of the first two THAAD batteries in February 2012 included 39 conditions that need to be resolved before a full materiel release could be granted.

The THAAD Project Office and the Army have begun to address these conditions . . . Fixes and testing of remaining conditions are scheduled through 2017.

. . . Different failure modes were seen in two tests creating uncertainty in the Mean Time Between System Abort. Improvements are also needed in deployability, manpower and training, human factors engineering, and interoperability.

In light of what is known and not known about THAAD, it is understandable that fierce debates have been occurring in South Korea on the effectiveness and the necessity of THAAD even after the government’s announcement to deploy it. Usually debates and adjustments are conducted prior to such a high-level decision, not after. It is a system which requires land and extensive resources, will be operated by U.S. Forces Korea, “and South Korea will have no say – or even notification – in how the radar functions” (Elich, 2016). So lack of public debate and consultation is a third issue.

Lastly, the biggest issue is how deployment of THAAD will affect the diplomacy between ROK and China. After the 8 July 2016 announcement, the Chinese Ambassador to South Korea, Qiu Guohong, said China was against the deployment of THAAD and that it would be destructive to Sino-South Korean relations. This can be interpreted as a genuine threat for Korea as China is South Korea’s largest trading partner.

Why is China against THAAD deployment and how will this affect South Korea?

There are number of reasons as to why China is against THAAD deployment. One reason is the AN/TPY-2 radar whose range of up to 2000km has the “capability of seeing a baseball from 2000km out” (Park, 2015). China claims that by having this radar, China’s missile technology can be seen by the U.S. and South Korea, and this means Chinese national security is jeopardised. Moreover, “the radar can literally act as a video surveillance camera” (Oh, 2016), causing China to assert that the deployment of THAAD is not for the security of South Korea, instead it is a strategic move by the U.S. to monitor and curb Chinese military movements.

Another reason for China’s concern is that THAAD in the ROK would make it part of the American missile defense system. This implies that geographically the U.S. can access Asian countries’ military information allowing it to plan ahead. This goes against Beijing’s regional military strategy of trying to minimise American influence in Asia, while expanding its own (Memune, 2016). As the tensions between the U.S. and China have been building up in recent times with South China Sea problems, along with a dispute over the ownership of the Senkaku/Diaoyu Islands between China and Japan, China does not want to add South Korea to its list of diplomatic difficulties. The anger towards China could lead to a strengthening of the military alliance of Korea, the U.S. and Japan in China’s immediate neighbourhood, thus shifting the balance of power in Asia (Park, 2016). On the other hand, if Seoul is in agreement with Washington on THAAD, which directly transgresses China’s national security, China cannot just ignore this matter. It could escalate into a new ‘cold war’ between South Korea and China and this would significantly impact South Korea in many respects.

The economy is an obvious potential casualty. Han (2012) notes that that over “the past two decades the two states have advanced their political, economic, diplomatic, and cultural relations with unprecedented speed”. The key to this development comes from the fact that bilateral economic benefits were significant and statistics show that “trade between the two countries has increased approximately thirty-five times, from \$6.37 billion in 1992 to \$220.63 billion in 2011” (Han, 2012). Today, China is the largest trading partner for South Korea by far with the amount of exports to China being more than to the U.S. and Japan combined. Also China is the number one recipient of Korea’s outflow of investment and the significance of China was reflected in the Korean stock market after the announcement of THAAD. KOSPI (Korea Composite Price Index), which is the indicator of the health of the stock market, dropped by 10.98 points in one day; especially hard hit were companies producing goods for Chinese consumers, such as cosmetics, fashion attire and motor-vehicles.

Some economic experts argue that China cannot just ‘crackdown’ on trade with South Korea due to the China-Korea Free Trade Agreement (Cho, 2016). However, others claim that China can affect trade and the economy of Korea in obscure ways without violating the agreement directly. One of the ways is the use of ‘necessary’ customs procedures and hygiene inspections as a ‘tool’ to curb and restrict trade and China has a history of such

actions. A recent example concerned the Philippines. China deemed its banana exports to be hazardous because of excessive use of pesticides, a decision associated with their South China Sea dispute (Reuters, 2016). For the ROK, its exports – such as cosmetics – could meet a similar fate.

Another way for Beijing to retaliate would be by pressuring the Korean enterprises in China. The *South China Morning Post* reported that China could restrict the number of 'Youke' (Chinese tourists) to South Korea. According to Lee (August 2016), the impact of Youkes on the Korean economy is not minimal and explained that Chinese customers account for 60% to 70% of sales in duty-free shops. In Korea, tourism is often called an 'export industry without factory chimneys' (Lee, 2015) and it is a big part of the national income for a country that lacks natural resources; therefore, a drop in the number of Youkes would directly affect the Korean economy in a negative way.

There are other ways of harassing South Korea. One of them is by the Chinese authorities neglecting Chinese illegal fishing in the South Korean sea border area. This has been a huge problem since 2011 (Shen, 2011), and continues to be: in the first half of 2016, Chinese illegal fishing boats have been detected in Korean water on at least 520 occasions (*The Korea Times*, 2016, citing the Ministry of National Defense). The problem could escalate to a dispute about ownership of territorial seas. All these possible scenarios that can be implemented by China could be devastating economically and diplomatically to South Korea.

How does THAAD impact the relationship between the two Koreas?

As noted above, in February 2016, South Korea suspended operations at the jointly run Kaesong Industrial Complex (KIC), following the North's fourth nuclear test. This was a significant incident for the two Koreas, because it was the last remaining point of peaceful engagement between them. Analysts contend that the deployment of THAAD on top of this incident increases the risk of inter-Korean war once again, and they even go on to say the Korean peninsula can become the 'actual battlefield' in a conflict between the United States and China, with South Korea being on U.S. side, and the North supporting China (Kwon, 2016).

In another analysis, forwarded by Hyeon-Jun Jeon from the Northeast Asia Peace and Cooperation Initiative (NAPCI), the deployment of THAAD is viewed as having a negative impact on China's military power, upon which North Korea depends for its protection. (*DailyNK*, 2015) This can be very dangerous, as the North would lose the relationship with China, becoming completely isolated and alienated from the global society. This would increase the chance of an invasion of the South, and the war could even include use of nuclear weapons. Irrespective of whether a war would occur, the heightened expectation of an invasion would impact on South Korea's political and economic stability with foreign investors reluctant to commit to a country in such peril.

It is also important to highlight how this would impact the unification of the two Koreas. It has commonly been argued that unification would result in a Unified Korea becoming a huge military power, and although there would be an economic burden to the South, associated with unification at the initial stage. However, Rolf Mafael, Germany's Ambassador to South Korea noted the economic potential of a reunified Korea: a market of more than 75 million people and complementary economic factors, which will clearly exceed the initial costs (Dominguez, 2014). So by deploying the THAAD now, the two Koreas will be at high risk of never recovering the positive potential of their relationship. This would be devastating for Koreans as they would miss out on the significant benefits arising from unification.

Conclusion

The announcement of THAAD's deployment created regional shockwaves as it was viewed as Washington's direct challenge to Beijing in shifting the Asian power balance more decisively towards itself. There is a Korean saying, 'When whales fight, the innocent shrimp are hurt', and this applies directly to the situation that South Korea finds itself in today. By deploying THAAD, Seoul risks losing its valuable relationship with China and this will affect Koreans greatly in terms of economy as China is the largest trading partner of the South. Although Beijing cannot directly stop the trade due to Korea-China FTA, there are many other ways for China to torment South Korea and the results could be devastating. Also it is important to assess the actual necessity and the effectiveness of THAAD once again, as currently many are challenging this (see Lee, J. Oct 2016). If it is found to be 'unnecessary', South Korea needs to assert itself against its big ally, in pursuit of its national interests.

More importantly, the Korean peninsula is at high risk of war once again from this deployment and, as matters stand, the chances of unification look dimmer than ever. The South Korean government must not ignore the benefits arising from unification and needs find the way to alleviate tension with the North. Otherwise, having to go through the tragic event of war once again could result in 'Korea' not simply divided but disappearing from the map.

The more measured approach would be "a conditional withdrawal" of plans for THAAD deployment. Inje University professor Kim Yeon-cheol said at a policy debate at the National Assembly Members' Hall on 21 October 2016: "What we need is an 'exit scenario,' where we make diplomatic efforts - including a resumption of the Six-Party Talks - and immediately halt the THAAD deployment if progress is made on the North Korean nuclear issue. . . . But we need to temporarily halt the THAAD implementation process while diplomatic efforts are being pursued" (quoted in Lee, October 2016). Diplomacy is better than military solutions, especially since Korea does not want to be sacrificed as someone else's battleground.

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