



## “Analysis on Defense Reform Plan 307 of Korea”

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**Speaker: Bruce Bennett (RAND Corporation)**

**Bruce Bennett** is currently a senior defense analyst at the RAND Corporation who works primarily on research topics such as strategy, force planning, and counter-proliferation within the RAND International Security and Defense Policy Center. He received his Ph.D. in policy analysis from the Pardee RAND Graduate School. He specializes in “asymmetric threats” such as weapons of mass destruction (WMD) and how to counter those threats with new strategies, operational concepts, and technologies. He is an expert in Northeast Asian military issues, and has addressed issues such as future ROK military force requirements, the Korean military balance, counters to North Korean chemical and biological weapon threats in Korea and Japan, dealing with a North Korean collapse, and deterrence of nuclear threats. He has worked with the Office of the Secretary of Defense, the Defense Threat Reduction Agency, U.S. Forces Korea and Japan, the U.S. Pacific Command and Central Command, the ROK and Japanese militaries, and the ROK National Assembly.

### **Dr. Bennett’s Speech**

BENNETT: My interest in defense reform goes back a considerable period of time. In 2005—when the previous defense reform plan was introduced—I was asked by a member of Korea’s National Assembly to undertake an honest assessment of that reform. I tried to do so in a fairly comprehensive manner, looking at requirements for Korea, future opportunities and challenges, budget issues, and so forth. That led me to follow similar issues as the program was reformed in 2007 and once again in 2009. However, before turning to discussion of the new 2011 plan, I would like to begin by talking about the requirements, and then comparisons, of the plans as they have evolved over time.

In 2005, the focus was primarily on a possible North Korean invasion of South Korea.

However, provocations over the last year have had a lasting impact on the public psyche, especially highlighting the serious implications of those provocations. While the possibility of an invasion is not forgotten, it seems as though some form of collapse in North Korea is increasingly possible. Moreover, unification at some point in the future is gaining more interest. If both collapse and unification are possibilities, it is important to think about the security community post-unification.

Eradication of the military and its immediate rebuilding from the ground up is not a possibility post-unification—the capabilities possessed before unification will be carried into post-unification. Therefore, it is important to have a structure—a set of capabilities and alliances which allow a wide variety of situations to be addressed. While the system should allow room for adjustments based on different scenarios or conditions, it still has to be a robust and concrete system. With those as background requirements, another issue to remember is the increasing requests made to Korea for external security aid. Whether it is in the Gulf area with pirates or in Lebanon, Korea has become increasingly involved in security requirements from a global perspective. As other militaries in the world grow smaller, there will be increasing requests to Korea for help as different situations arise around the world.

Now, let's contrast the two reform plans—the original prepared in 2005 and the plan currently being formulated. As a preface to this discussion, I would like to state that I am not privy to inside information regarding Defense Reform 307, and I have not been briefed on it. I have only seen what has been covered in the media, which is biased toward the recent provocations.

In 2005 it became clear that South Korea was facing a severe demographic problem. Between 1975 and 2005, more than 400,000 men turned 20 years old each year in South Korea, and the military drafted almost every one of them. In 1975, the military was largely conscripted, accounting for almost 78% of manpower in all services combined. However, with demographic decline on the horizon, the number of conscripts will decline, in turn affecting the size of the military. The projection for the year 2020 is roughly 300,000 men turning 20 years old—a substantial reduction in the pool of available manpower. While a variety of methods exist to manage that situation, 2020 does not mark the end of the downturn. By 2025, there will be only slightly over 200,000 young men turning 20 years old. That implies that over the next 15 to 20 years, the military could grow much smaller unless a

very different organizing procedure is adopted. As the military grows smaller, it will be important to find a way to continue to balance its capabilities. An idealistic scenario would be for North Korea to collapse sometime in the next couple years making the retention of a large military unnecessary. However, there is no way to know what will happen in the future, and it is entirely possible that North Korea will continue to exist for another 15 to 20 years.

In 2005, the defense reform plan recognized the fact that there was no choice but to reduce manpower and use what manpower was available more efficiently. Based on the plan put in place by President Rho Mu-Hyun, the conscription period would have been 18 months by 2020. On average, officers and NCOs serve a little over 6 years, so for every person who becomes an officer or NCO, it is equivalent to the manpower of four conscripts over time. Thus, reorganization was needed to take better advantage of the NCOs and officers. In fact, South Korea's national assembly, when it passed the 2006 act on defense reform, required that each of the services have 40% NCOs and officers by 2020. For the navy and the air force that was not a big change. But for the army, where officers and NCOs comprise about 20% of the force, that was a significant change.

The major thrust of the plan was to identify new weapons systems and capabilities that needed to be provided, the budget required for those systems and capabilities, and the period of time they would be needed. Needless to say, there had to be a large increase because the defense capability improvement budgets at that time, even under a different accounting system, were not that large. The budget—for both acquisition and research and development—was somewhere in the neighborhood of \$5 or \$6 billion a year. That amounted to only about 5% of what the U.S. military was running at the time. Just to compare, the South Korean military, which is about half the size of the U.S. military, was only spending about 5% as much.

Defense Reform 307 considers a variety of issues, but the issues which have captured the attention of the press are those concerning the response to provocations in the short-term—in the next 2 to 5 years. The media focused mainly on the command changes with the JCS chairman and acquisitions to facilitate better response to provocations. So in that sense, the focus of the two efforts was slightly different. It is important to ask about the success of the defense reform from 2005. Taking the 2005 budgets and projecting them forward, what has really happened in the last six years?

Unfortunately, that cannot be done because in 2007 the Ministry of Defense changed its accounting system. Spending that used to be included in defense capability improvement has been moved, and other spending has now been included. So, while a comparison between 2005 and 2011 is very difficult, a comparison between 2007 and 2011 is much easier. Comparing the budget for 2011 with the 2011 budget as projected in 2007 shows that the 2011 budget is about 95% of what was projected for the majority of the budget—operations, maintenance, and troop costs. In terms of defense capability and improvement, the 2011 budget is about 75% of what was projected. The shortfall for this year alone, compared to what was projected, is 3.3 trillion won—about \$3 billion.

Remember that the budget is allocated based on a percentage increase over the previous year's spending. So if the budget is 3.3 trillion won lower this year, it will also be 3.3 trillion won lower next year, and the year after that. A considerable amount of the capability improvements that had been postulated as being able to replace manpower, even four years ago, will have to be foregone. Much of the challenge for the Ministry of Defense today is trying to figure out how to use the limited budget available to cover all of the requirements.

With regards to the sinking of the Cheonan, it is immediately clear that if there were sensors in the Northwest island area to detect submarines, it might have been possible to defend against the North Korean attack. The waters there are tricky because it's not a deep ocean area, but it would not have been impossible to detect. As for the Yeonpyeong Island incident in November, it is clear that when there are only 6 Howitzers on the island—and 3 of those are doing something else or are down—and only one counter battery radar—which was not operating at the time—trying to respond to North Korea is very difficult. On the other hand, let's be very clear about that provocation. North Korea fired 170 artillery rounds, and only 80 hit the island. Anyone with knowledge in artillery realizes that, for an island that size at a range of about 10 kilometers, more than half of those shells should have hit the island. So if North Korea wanted to claim any kind of superiority over the ROK, the reality is that it proved it is not. Moreover, of the 80 that did manage to hit the island, 20 did not go off—they were duds. That is an incredibly high percentage for artillery. So South Korea should not be ashamed of the quality of its military. It has quality military personnel and systems, but those are not enough to deal with situations like the shelling of Yeonpyeong.

In December, the Ministry of Defense augmented the capabilities on the islands, and followed with an artillery firing exercise. How did North Korea respond? Its initial statement was that it would respond with hostility if South Korea carried out its artillery firing exercise. However, following the exercise North Korea said it was not important and opted not to respond.

There is value in denial of an opponent's objectives. When North Korea cannot achieve its objectives, it will not pursue them because it does not want to look weak or, worse, to fail. North Korea's provocations are mostly for internal political purposes. It did not sink the Cheonan because it was trying to defeat the ROK navy, and it did not shell Yeonpyeong Island because that was phase one of an invasion that was going to proceed over the following days. These were primarily political actions. So it needs to be understood that if the responses by South Korea can deny any apparent success to North Korea, it will largely be deterred.

So, where does defense reform stand? I think the Ministry of Defense has been very positive about trying to pursue means to deny North Korea's capabilities. The buildup of the Northwest Island's defenses and new command has all been very positive in dealing with the threat. However, the bigger underlying challenge for South Korea is the vulnerability of its capital.

Seoul is very vulnerable to long range artillery and ballistic missiles originating from North Korea. South Korea has some of the technology needed to intercept ballistic missiles—the Patriot missiles Korea obtained from Germany over the last couple of years could potentially provide anti-ballistic missile capability if upgraded, and Korea is working on that process. It is also working on going beyond that and adding naval-based capability, but the limitation in budget is fundamentally slowing this process. Missile defenses are expensive—interceptor missiles cost more than the SCUD missiles they shoot down. However, if a country wants to protect itself and wants to deter provocations in particular, it needs those kinds of defenses. Kim Jong-Il is not going to fire artillery on Seoul if he thinks it will be shot down because that would be a huge embarrassment in the internal political environment. It would demonstrate that the North Korean military is clearly inferior to that of the ROK.

Some in the room may be wondering how long-range artillery rockets can be shot down. Actually, Israel fielded such a system about two weeks ago. Dubbed "Iron Dome,"

Israel rolled out the prototype last week, and in its first weekend of field testing it shot down 8 Katyusha rockets fired out of the Gaza Strip. Does that mean that this system could defend Seoul against any possible threat that could be thrown against it? Not yet. But it does provide a glimmer of hope that a potential solution is on the horizon. This summer the U.S. Army will be testing a laser defense system with the same potential, and it may also be effective against shorter-range ballistic missiles. Looking to the future, there are significant opportunities to cover Korea's defensive gaps.

The question is if there will be room in the budget to acquire the prototypes, to test and use them, and to acquire enough of the systems. That does not mean that Seoul will be 100% defended. In a provocation, North Korea is not going to fire 500 rockets into Seoul. Any provocation would be more limited. If that threat can be neutralized it represents a serious deterrent to further North Korea provocations, and that is a good foundation on which to build. So, even a prototype has value in this regard.

The other part of short-term defense reform that is getting a lot of emphasis on the hardware side is strike capability—the ability to strike back. Korea needs advanced aircraft, munitions, and advanced capabilities to strike—with precision—targets in North Korea. South Korea has relied on U.S. capabilities to do much of that for many years, but now it is the time for Korea to have that kind of capability on its own. The Ministry of Defense is pursuing those kinds of capabilities.

Exactly how this proactive deterrence concept is implemented is an interesting question, but it is a key to the response to North Korea. Had the ROK had those capabilities in place in November, an escalation against North Korea would have been fairly attractive to try to deter North Korea from future provocations. Considering the history of provocations, when has North Korea ever concluded post-provocation that it has paid a higher cost than the benefits it has gained? A fundamental criterion for deterrence is to make the provocateur believe that it is going to pay a bigger cost than the received gains. Go back to 2009 when North Korea conducted nuclear tests. There were a lot of perceived benefits for North Korea—appearing empowered as a regime, demonstrating the strength of the military, and the potential sales of nuclear capabilities. What was the cost? There were some sanctions, but they were never fully implemented. Moreover, those sanctions were not laid out in any kind of detail for North Korea beforehand and, therefore, did not act as a deterrent.

One of the key points in deterrence literature states that vague threats against a risk-taker are not effective. Threats need to be concrete. If the United States and its allies make vague threats of economic sanctions, which North Korea merely hopes will not be implemented in reality, it is not much of a deterrent. The threat that President Bush made against North Korea after its first nuclear test is a prime example. He basically stated that a nuclear test was one thing, but the true line in the sand was drawn at proliferation. That is, if North Korea were to sell its nuclear systems to other nations then the United States would be forced to take action. But, what did the United States do after it was discovered that North Korea had set up the Syrian nuclear power plant? Nothing. Of course, the difficulty was that the United States could not conclusively prove that North Korea had been involved in Syria, and when conclusive proof cannot be offered it becomes very difficult to take military action.

Thus, it is essential that an environment be created where costs are greater than benefits. Ironically, I would say that the Yeonpyeong Island incident comes rather close. I believe Kim Jong-Il made a fundamental miscalculation in November. He had not anticipated the strong reaction of the South Korean people and their unity in response to the provocations. Kim Jong-Il was hoping to cause a split in the population, not create the unity displayed by the South Korean government in their effort to fight the provocations. Already, he is seeing that it is possible that he may face costs greater than the benefits.

So South Korea is moving in the direction of deterrence, but what is the next step? If Kim Jong-Il conducts a nuclear test in the coming months, what will be done to deter him? The ramifications of such a test need to be very concrete and the involved nations need to go directly to the North Korean regime and privately inform it of what will happen, not only if it conducts the nuclear test but also what will happen if the situation escalates afterwards. Much like when playing chess it is not enough to wait until the opponent makes a move. The other player needs to be thinking 2 or 3 moves ahead and have a concrete plan. That type of thinking is what has largely been lacking, and the greater capabilities the Ministry of Defense is pursuing in the defense reform will give them that potential.

There are certainly controversial portions of the defense reform, such as the change of the defense leadership in JCS, for example. There are also portions which are positive, such as getting rid of the dual command tracks as a more unified command track is needed in order to have prompt responses to provocations. There are other aspects of that change which



have raised controversy within the community, but it needs to be recognized that there are tradeoffs.

Anyone who follows economics knows that as supply goes down, price goes up—the basic principle of supply and demand. If the supply of manpower goes down, the price of that manpower is going to rise. In the U.S. military, some military personnel are being paid \$100,000 bonuses to reenlist. Benefits that are effectively \$70,000 in terms of education, training, housing benefits, and so forth are not uncommon. The United States has learned that it can be expensive to acquire manpower, and Korea has not yet faced that challenge because of conscription. But even getting the needed volunteers might become more expensive. If the defense budget is fixed and the cost of manpower goes up, there is less money to acquire hardware and defense capabilities. There are some interesting tradeoffs coming in future years, and I look forward to the Ministry of Defense’s announcement of not just the short-term plans, but the longer-term plans that are supposed to last until 2030.

## **Questions& Answers**

**Q1:** On the tactical front, can you talk a little bit about the air counterstrike capability that the ROK air force has right now, and how compromised that is, if at all, by North Korea’s air defense capabilities?

**A1:** Regarding counterstrikes, the kinds of munitions the ROK Air Force is trying to acquire are standoff munitions. The airplanes do not need to fly over the target and drop the bombs. While staying south of the NLL, the missiles can be fired and then guided to the target. That is a fundamental change in that it reduces the traditional vulnerability of putting the pilots at risk. However, there are risks in any kind of warfare, and it is important to make sure that the targets being hit have value, are useful, and do not give value to Kim Jong-II. What do I mean by the latter? I think there are targets that Kim Jong-II would love to be hit—such as Pyongyang or a SCUD base—that would unify the military behind his regime. So care needs to be taken in choosing targets.

**Q2:** Information barriers seem to be the major strategic vulnerability of North Korea. Can



South Korea attack these barriers directly? Why is this not being pursued?

**A2:** Several recent studies have been done of defectors and Chinese businessmen in North Korea, and these studies have reported that as many as 50% of the people are getting messages from the outside and know at least a little about what is going on. Half of that 50% receive messages directly and the other half know by word of mouth. Most of these people who are getting information from the outside are in the elite. The elite are a group that I would like to affect, and they need to get the message that North Korea is making these provocations because of weakness, not strength, in the regime. If the regime is so worried about its weakness that it is prepared to take on such risk, it must be very worried indeed. If that is the case, all involved need to be better prepared for collapse than they are thus far. This is not inconsistent with President Lee Myung-Bak's statement in December that unification may happen sooner than expected.

**Q3:** By reinforcing capabilities to successfully deny attacks on Yeonpyeong Island and adjacent areas, does that further expose Seoul to future provocations?

**A3:** There are a lot of easy shots that Kim Jong-Il can take today against the ROK because of defensive gaps. Those are things that he is tempted to do, but he has to be very careful because there are some people in South Korea that believe that one round into Seoul means war. That would be the end of this provocation-limited war. At this point in time, Kim Jong-Il's objective is to remain taking limited risks, but still accomplishing significant strategic objectives internally, such as demonstrating that he is still in power. I think that is what is constraining him. Should the regime become more unstable, he may be prepared to take those risks. But hopefully, we have several years to prepare for that, and that is why I mentioned things such as missile defense, the Iron Dome, and lasers. Now is the time to acquire such items because deterrence will be even more important as he is willing to take greater risks.

**Q4:** As the ROK enhances its conventional capabilities the DPRK is likely aware of these improvements. Does this not spur the regime to further develop its nuclear capabilities and make the situation more volatile?

**A4:** As conventional capabilities are enhanced by South Korea, asymmetric threats—not limited to nuclear weapons—come to the fore. It should be remembered that Kim Il-Sung was not an army officer, but a special forces officer. That culture carries over within his government and military. I think North Korean Special Forces are already operating in South Korea for reconnaissance purposes, and I suspect that we could see actual attacks in the future either with conventional weapons or some form of asymmetric threat. However, there are steps which could be taken to prevent asymmetric threats that are not necessarily related to defense reform.

If South Korea had an integrated passport database with China, Japan, Mongolia, and so on, North Korean Special Forces could not use fake passports to enter South Korea. There are other kinds of defensive actions that South Korea needs to take to cover all the potential gaps that exist. But is pushing North Korea to nuclear weapons more dangerous? North Korea knows that if it ever uses nuclear weapons it has crossed an incredible divide, and there is very little doubt that nuclear weapons would be used in retaliation.

**Q5:** One of the drivers of Rho Moo-Hyun's 2020 plan was the looming decline in the number of conscripts. With Lee Myung-Bak's 307 plan, do you feel the problem of demographic change has been adequately addressed?

**A5:** The Rho Moo-Hyun plan was indeed very much focused on demographics. Thus far, the press reports on Defense Reform 307 have not dealt much with demographics, but it does say that in 2020 the military will be reduced to about 500,000, which was, roughly speaking, the plan from 2005. I suspect that in the Ministry of Defense there is a lot of evaluation taking place. The 18 month conscription period would have allowed a force of about 530,000 in 2020, slightly larger than what was planned. With the 21 month conscription period, my estimate for the force size is approximately 580,000. What will be done with the rest of the people? Should combat police be maintained as a future capability or should permanent deferments be given to some? It remains to be seen what Defense will do on this matter.

**Q6:** Under the UN mandate, there is a robust international response in Libya. How has this impacted the strategic thinking in both Pyongyang and Seoul?

**A6:** I do not think Pyongyang likes any of the affairs going on in the Middle East. It certainly does not want any of the information coming out of the Middle East to reach North Korea. It even went so far as to dictate that no North Korean currently living in Libya may return to North Korea, a particularly telling aspect of its worry about information.

**Q7:** If you look at the budget today, do you think South Korea's planning for its military is realistic?

**A7:** Korea has a very limited budget, so there need to be specific tradeoffs. Within the military today, the ability to strike against North Korea as South Korea, and not as the United States, would be a very strong political statement against the North. It will be important for the South Korean government to acquire aircraft that can achieve that with stealth capability. That will make it possible to achieve the same goals with a smaller number of aircraft. Having such aircraft will help not only in dealing with provocations but also in case of a full-scale war. South Korea would have the ability to neutralize North Korea's air defenses. Can South Korea afford that kind of system? The question is how to do that at the least cost. Is it more cost-effective for Korea to develop and produce its own weapons, or is it more cost effective to purchase them from outside and do a licensed production like it did with the KF16?

**Q8:** Do you have a specific proportion in mind in terms of GDP and defense spending?

**A8:** The numbers that I have seen most recently for Korea are around 2.5% to 2.6% of GDP going towards defense. By contrast, the United States is around 4%, and that is before counting the cost of operations in Afghanistan and Iraq. Where in the world is there a greater military threat than in Korea, except the insurgencies that the United States is now fighting? I think a larger budget would be more appropriate, but the South Korean government needs to explain to the public the gravity of the threats that they are facing and what is needed in order to deal with those threats. The original Defense Reform Plan 2020, from 2005, had a target of 3% of GDP, which would allow for having the necessary capabilities.

In terms of budget and moving towards the future, it is imperative to explain the cost of even one nuclear weapon being detonated in Seoul. A single detonation would cost about \$1 trillion. How much investment in defense is it worth to prevent this? In thinking about this I refer to a statement made by Bernard Brody, one of the most famous American strategists of the nuclear age, in 1947: “Historically, the role of our military forces has been to fight and win wars. In the future, the role should be to deter wars.” What more important role could they have? We need to think about how to use the military forces to deter war. During the Cold War, the United States spent a lot of money on developing strategic nuclear forces and while it was never used, it was not a waste because it deterred war. Had a single Soviet ICBM landed in a U.S. city, the cost to pay for the damages would have far exceeded the cost paid for deterrence. That is the tradeoff that the people need to understand.

**Q9:** Do you think it is necessary to increase the capability to handle instability in North Korea?

**A9:** Dealing with a collapse in North Korea is different from other scenarios in that it will be very manpower intensive to effectively counter any insurgency and criminal activity. There needs to be a way of capturing that manpower and training it.

**Q10:** Are there lessons to be drawn from what has happened in Japan in terms of the role that the U.S. forces have been playing there?

**A10:** The United States has contributed a lot, but could have contributed a lot more had they been allowed to do so. Radiation is a tricky thing to deal with, as Japan has discovered 4 weeks after the earthquake and ensuing tsunami. There are areas that have to be evacuated for the long-term, and these are areas that are 40 kilometers away from the nuclear plant. There need to be better integrated capabilities in order to deal with such situations.

**Q11:** Coming back to information warfare, right now in South Korea only the private sector is involved. Should the ROK government be investing in this very cheap and effective offensive strategy, either in an overt or covert manner?

**A11:** NGOs have been doing an excellent job, and the government really should be exploiting them more. In the end, East Germany collapsed without fighting a war, not because the weapons were taken from the German army, but because the German people were convinced that unification would be a good thing. How did the West Germans convince the East Germans of that? How do North Koreans get to that point?

**Q12:** South Korea is obviously going to have to downsize its military, and it might be a good thing to bring additional U.S. troops from Japan. How can Washington and the U.S. public be convinced of this?

**A12:** In terms of U.S. politics, if the ROK is going to reduce its military and not increase the financing consistent with what was originally planned, it will be difficult to convince Washington. It would be easier convince the Marines because the United States is about to spend around \$10 to \$20 billion moving marines to Guam, but some of that force could be moved to South Korea for far less money. However, the time window on that is limited.

**Q13:** The people of South Korea are well aware of the risks of escalation in provocations, but those in Washington, with so much on their plates, are they aware of this risk?

**A13:** I think it is no surprise that the Extended Deterrence Policy Committee was set up, comprised of members from the ROK Ministry of Defense and the U.S. Department of Defense. I can guarantee there is considerable concern for the potential of escalation on both sides. As Brody said, deterrence is what we want right now, not war, but we are moving into an area where the academic and practical knowledge of how to do that is not well established. During the Cold War, it took roughly from the late 1940s until the 1960s for the deterrence doctrine and other concepts to crystallize. There has not been much effort to develop concepts for deterrence in the new world, and North Korea is a particularly tricky case. While there is literature that deals with cases similar to North Korea, the literature is not yet tailored to North Korea.