The Next Nuclear Agreement with North Korea: prospects and pitfalls
Highlights of October 29 Workshop*

With the primarily positive developments of 2007, the potential for a long-term agreement between the United States and DPRK is greater now than at any time in the past five years. The February 13, 2007 agreement, and the follow-on meetings that have been held within the Six Party process and at the working group level, have led to continued, albeit halting, progress. The DPRK has begun the process of disabling its reactors and has pledged to provide the United States with a complete list of nuclear-related sites by the end of 2007. The United States has provided 50,000 tons of fuel oil, pledged to take the DPRK off the terrorism list and begin removing economic sanctions, and has alluded to a possible political relationship of some type in the future. The framework of the February 2007 agreement is rooted in the September 19, 2005 Joint Statement. The creators of the new deal intended to “sharpen” what was already agreed to in 2005 with respect to cultural exchange(s); normalization of relationships; status of DPRK vis-à-vis the U.S. State Department’s List of State Sponsors of Terror and the Trading with the Enemy Act; clarification of which party/parties would pay for disablement; and the delivery of heavy fuel oil.

It is important to begin thinking now about the potential long-term issues and problems that the United States may face as it moves forward with its relationship with the DPRK. Although there are clearly many potential obstacles that could derail the process at any time, it is also prudent to consider how best to implement an agreement, and what the actual details and costs will entail. The AAAS/NCNK October 29 workshop focused on three areas of concern: the political issues involved in

* This briefing paper is drawn from a report drafted by Dr. David Kang. It also includes information drawn from follow-up research and interviews.
dealing with North Korea; the costs and actual problems in decommissioning nuclear facilities; and potential congressional hurdles involved in removing sanctions from the DPRK. All three issues will likely be far more difficult to achieve than many observers expect.

Political issues†

- As impediments arise in implementation, such as delays in reaching certain goals, U.S. negotiators will need to determine if the United States is better off with a deal than it would be without one.

- Even a relatively cooperative North Korea will provide information that is partial at best, so how much information is enough: will the deal still make sense even if there is the almost inevitable partial disclosure rather than full disclosure?

- The United States will have to define what is a “meaningful violation” (versus a mere “violation”), of the agreement. For example, in the Declaration will a few ounces of plutonium below the best estimate make a difference? Four kilograms?

- The final document will almost certainly be a negotiated one. North Korea, and perhaps the US as well, will likely provide “additional details” outside the formal declaration.

- Most participants felt that the plutonium programs were close to being under control, and a complete stonewalling by the DPRK of its suspected HEU program is considered unlikely. In fact, some observers summed up the situation as relatively positive: plutonium production has been stopped, the HEU program is not perceived to be advanced enough to pose a threat, and the Yongbyon facility is being disabled.

- The details on disablement are still lacking, making it difficult to evaluate.

- As the United States and the DPRK make progress on the nuclear issue, it is possible that human rights violations will become the top U.S. priority and the political relationship will suffer.

- Liaison Office: Some participants felt it is demonstrably in the U.S. interest to have a physical presence in North Korea and would push very hard for liaison office in North Korea. However, other participants questioned whether the United States is really willing to consider a diplomatic relationship with the North.

- Transfer of knowledge or material to Syria would change everything. If there is a link between the DPRK and Syria, the timing of when any transfer took place is critical.

† This section draws on a presentation by Dean Robert Gallucci and the conversation it inspired.
Disabling and Decommissioning DPRK nuclear facilities

Operating Environment

- Virtually all equipment and materials will likely have to be brought in from elsewhere.
- For safe operations, many of the appropriately skilled personnel will likely have to come from outside – and will demand high salaries to work at Yongbyon.
- The project must be structured to provide incentives to the DPRK for work to move quickly; the Agreed Framework was structured to provide incentives for delay.
- No waste disposal site or vitrification facility.
- No functioning safety regulator.
- Limited roads, transport for heavy equipment; limited and unreliable electricity, heat, etc.

Five Dismantlement Tasks

- **Task 1: The plutonium production program**: plutonium production, separation, storage, and waste processing facilities.
- **Task 2: The nuclear weaponization program**: nuclear weapons and the means to research, develop, test, and manufacture them.
- **Task 3: The uranium enrichment program**: Dismantlement of uranium enrichment activities and the facilities to research, develop, test, and make enrichment equipment.
- **Task 4: Implementing the DPRK/IAEA safeguards agreement and bringing the DPRK into compliance with the NPT**: The DPRK will need to rejoin the NPT and come into compliance with it, including implementing the Additional Protocol.
- **Task 5: Redirecting North Korean Scientists and Personnel**: Ensuring that the up to 20,000 scientists and others involved in the nuclear program to have other sources of income/work.

Three Phases of Progressive Verifiable Dismantlement

- **Phase 1**: (Currently in early portion of Phase 1, addressing Task 1): The DPRK will halt proscribed activities, disable facilities and key items, and present declarations; the verification organization will monitor shutdown and begin to review declarations; the Six Parties will provide initial benefits to the DPRK.

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1 This section draws on presentations made by David Albright, Dr. Mathew Bunn and Joel Wit, and subsequent debate.
Phase 2: The DPRK will dismantle items and facilities and allow removal of key items; the verification organization will verify the dismantlement and removal of key items, and continue to verify declarations; the Six Parties will provide additional benefits.

Phase 3: The DPRK will come into compliance with the NPT; the verification organization will conduct verification activities to ensure against undeclared nuclear activities, and reach a conclusion about the completeness of the DPRK’s declarations; the Six Parties will continue to provide agreed benefits.

Verification: The structure of a verification body has not been finalized; see section on IAEA-plus below. All parties will benefit from dismantlement almost immediately, but the entire verification process will take several years.

Possible Dismantlement Timeline

- End 2007: Implement disablement of plutonium program and receive DPRK declaration of its nuclear program. The declaration is not expected to be complete.
- 2008: Verify declaration. Receive additional DPRK declarations.
- 2008: Six parties negotiate dismantlement steps by end of year. They may reach agreement to take some dismantlement steps in 2008. A decisive step, which may be considered unlikely at this point, would be removing plutonium from the DPRK.
- Late 2008 through 2010+: Conduct dismantlement and verify it. DPRK comes into compliance with NPT.

Decommissioning Tasks

- Decommissioning takes place after disablement, and primarily affects long-term environmental safety. It is of importance primarily to the two Koreas.
- The disablement process must anticipate the decommissioning process and should not interfere with nuclear forensics, which would make verification difficult.
- Depending on the approach, decommissioning will take years or perhaps decades.
- The known, expensive items to decommission: 5 MWe reactor; reprocessing plant; spent fuel; high-level radioactive waste.
- The less well-known and/or less expensive items: Fuel fabrication facility; plutonium component fabrication plant; weapons assembly facility; uranium conversion and enrichment
- Three options for decommissioning
  - SAFSTOR: Do enough now to enable the facilities to sit safely for decades. Postpone final decommissioning 50 years or more
• ENTOMB: Encase the facilities in concrete structures that will last for decades; destroy all secondary buildings. Postpone final decommissioning 50 years or more
• DECON: Proceed to complete disassembly and decommissioning of the facilities in the near term

❖ **ENTOMB most practical for DPRK**: SAFSTOR would leave technologies in the DPRK that might pose a danger in the future to ENTOMB; DECON would be too costly

❖ Steps to ENTOMB the Yongbyon 5Mwe reactor:
  • Cut critical pipes/vessel; remove, destroy, or encase in concrete the refueling equipment, control rod drives, steam generators
  • Destroy control room, secondary buildings
  • Encase reactor in concrete
  • Has been done in several countries in ~5 years for ~$20-$100M; would be costlier and take longer in DPRK

**From Disablement to Decommissioning – one scenario**

❖ Detailed assessment of facility design and degree of current contamination

❖ Establish a process to consider decommissioning options in detail in parallel with disablement; Begin 6-party discussions of decommissioning issues, order of magnitude of likely costs; develop an approach to structure the process so DPRK has incentives to move decommissioning forward, rather than incentives to delay – e.g., pay for achievement of specified milestones.

❖ Destroy “head end” – where fuel cladding is removed and fuel dissolved.

❖ Rest of plant needs to be kept functioning for 2 or more years to flush out radioactive materials.

❖ Complete building disassembly will take years and $100s of millions to do safely; another option would be after flushing out radioactive material, to fill process areas and the building with cement.

❖ There is a possible IAEA role in helping to develop a decommissioning plan (as in the current effort with Iraq).

**Verification – Arguing for and against IAEA Plus**

❖ The IAEA has vast experience and expertise directly relevant to the verified dismantlement of the DPRK’s nuclear weapons programs.

❖ The IAEA is technically competent and professional

❖ Adding necessary expertise from the nuclear weapon states would be straightforward and practical.
The IAEA’s extensive experience in South Africa and Libya provide a solid foundation to verify cooperative nuclear dismantlement.

The IAEA will have to be involved in verifying DPRK coming into compliance with the NPT. Thus, efficiency alone argues that the IAEA should have primary responsibility for the more straightforward task of verifying nuclear disarmament. Such a step would also help to avoid competing and possibly conflicting verification efforts.

Some participants argued that the DPRK would not allow IAEA involvement because they have no real intention of ending their program. Others argued that the DPRK has already briefed IAEA on steps to date.

Implementation

The United States could productively play a central role to make sure that its interests are met.

The United States should be the major contributor toward implementation. Congress under-funded the 1994 agreement, and the Clinton administration was criticized for successfully negotiating the agreed framework, only to pledge a mere $30 million a year to implement it.

The United States should consider establishing a “Korea Peace Fund.” This fund would contribute to dealing with security issues, beginning with disablement activities. This may also address issues such as North Korea’s missile, biological and chemical weapons, which the US administration will likely address.

The United States should also consider how to set up organizational structures to ensure implementation: as issues become more complex, the structures will need to evolve comprehensively to address such changes. These organizations will not be coordinated well in the Six-Party Talks; however, they should be able to report their activities back to the 6PT regime.

Perhaps a new KEDO could be established. This organization could be tasked with additional projects, perhaps relating to North Korea’s energy needs. The United States should consider all its options to ensure that North Korea does continue as nuclear power.

Legislative issues regarding removing North Korea from the sanctions list§

The Sanctions Framework

Removal of North Korea from the sanctions list is far harder than it appears. Forty-two different laws and regulations affect US-DPRK relations, and each one of them needs to be addressed individually. Taking North Korea off the terror list does not instantly lift the rest of the sanctions.

Legislation limiting North Korea’s access to the U.S. economy, market and financial assistance, as well as access to the international financial institutions, is based on the following reasons: North Korea is a Marxist-Leninist state; it is on the list of State Sponsors of Terrorism; it has detonated a nuclear device; it is accused of committing human rights violations; it plays a large a role in the proliferation of weapons-of-mass-destruction.

§ This section draws from presentations made by Dianne Rennack and Larry Niksch, followed by Q&A.
Depending on the particular law, the president can either lift or waive some legislation affecting US relations with foreign countries. The president has particularly broad authority to determine and waive findings regarding human rights. The president makes determinations in three areas – the foreign assistance act (annual human rights reporting requirement); the 1998 International Religious Freedom Act; and the Trafficking Victims Protection act of 2000, which since 2003 has found the DPRK to be a “most severe offender.”

Most foreign aid to North Korea is prohibited because it is a “Marxist-Leninist” country, and in order for this prohibition to be lifted, the president has to make three findings: that relations with that country is vital to the security of US; that the recipient country is not controlled by the “international communist conspiracy;” and that assistance would promote independence of the country from communism. Congress could strike the reference to North Korea in the legislation, or the president can remove the country from the list.

Most legislation has a “notwithstanding” clause; this language allows for some aid under certain conditions: biodiversity, food aid, health and disease, de-mining, international disaster assistance, and for other (generally humanitarian) reasons. Thus, the US can provide aid to North Korea for these reasons, “notwithstanding” the other sanctions, even though North Korea is one of the most sanctioned countries.

The president has the authority to request $50 million in foreign assistance a year without congressional approval.

Congressional options and concerns††

Congress has the option to reduce or condition the $106 million requested by the administration for fuel, etc. For example, Congress has the option of conditioning authorization or appropriation language on certain certifications or reports. However, it seems unlikely that any certification or reporting requirements that would impede implementation of the nuclear agreement would be included at this point. Certification/reporting requirements are used to express congressional opinion or lack of satisfaction about how a program is being carried out, and right now Congress is largely supportive or at least willing to support the administration’s approach for the time being.

Congressional staff noted concerns about the Glenn Amendment, which applies to countries that have transferred nuclear reprocessing equipment, materials, or technology or have exploded a nuclear device. Some believe this is the only sanction restricting the administration’s ability to request DOE or DOD funds for the implementation of denuclearization activities in the DPRK: unless or until legislation is passed to waive the provisions of the Glenn amendment, all funds must come through the State Department’s Nuclear Disarmament Fund. Others believe that the use of “not withstanding” language is sufficient.

Congressional staff reported a willingness on the part of some Members to fund disablement and dismantlement activities. However, at this point the administration has yet to request any additional funding for this purpose, although funds for HFO have been requested in the Iraq supplemental

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** On October 18,, President Bush waived the Trafficking Victims Protection Act prohibition against USG funding of cultural and educational exchanges.
†† The opinions captured in these notes reflect both the October 29 meeting and subsequent comments from or conversations with several personal and committee staff in both the House and Senate. However, the opinions reflected here should not be considered representative of all congressional staff, nor members of Congress.
request currently before Congress. A few staff felt that authorizations are more important than appropriations, since funding can always be requested in supplemental budget requests.

- There is debate about whether or not the administration has adequately addressed legal barriers to funding denuclearization with North Korea. Further authorizations may be needed to implement fully disablement and/or dismantlement activities. Some staff expressed a reluctance to use “notwithstanding” provisions because they want to know what laws are being circumvented in order to authorize funding.

- Some staff felt that existing nuclear disarmament funds (NDF) are sufficient for disablement: funds have been increased to high enough levels in the FY 2008 appropriations bill for there to be sufficient available funds to redirect funding as required to cover any expenses related to the DPRK. On the other hand, some staff are concerned about other programs that would have reduced funds as a result of such redirection.

- Although there is support for disablement and the current funding requests, some staff felt that for there to be long-term sustained support, the administration needs to present a comprehensive analysis showing all that needs to be done and the plan to address or implement each step. Congress will need to know “how we will know that we know all there is that we need to know.”

- Some feel that there isn’t sufficient accountability to Congress at this point. Congress needs to be kept informed, and doesn’t want to be blind-sided. On the other hand, other staff feel that at this point, and perhaps for the foreseeable future, step-by-step is the only way to go about funding programs in the DPRK. The U.S. has considerable experience in dismantlement and will draw on that experience as it interacts, on a step-by-step basis, with the DPRK.

- There seems to be declining interest in the issue of Japanese abductees on Capitol Hill. However, for some members it is not just a human rights issue; it is also about the US-Japanese alliance. Also, ultimately Japan will need to pay part of the cost of denuclearizing the DPRK; Japan’s concerns matter in the long-term as well.

- From the perspective of many congressional staff, light water reactors are off the table for the time being. There would have to be considerable progress in complete denuclearization (removal of weapons and systems for making weapons) for Congress to look favorably on a LWR deal.

- Constituents continue to express their concerns to Congress regarding human rights and the treatment of refugees. Congress has the option of proposing legislation similar to the current Burmese Freedom and Democracy Act, which would continue selective sanctions against North Korea related to human rights rather than nuclear proliferation.

- There are several options available to the administration, if Congress creates political pressure against complete removal from the terrorism list. Although this seems increasingly unlikely, such options include:
  
  - Retain North Korea on both the “state sponsors” list and the list of states “not fully cooperating” on terrorism issues;
  - Remove North Korea from the “state sponsors” list but retain it in the “not fully cooperating” category;
  - Remove the DPRK from both lists, including it instead in an informal “countries of concern” warning category.