

DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA

1. LOCATION AND CAPABILITY OF NUCLEAR FACILITIES

North Korea's first nuclear energy research complex was created at Yongbyon in 1964. Other facilities at that site, including a Soviet research reactor and a plutonium reprocessing plant, were soon added.

Most arms control experts suspect North Korea pursued an active weapons program up to 1994, when it signed an agreement (known as the 1994 Agreed Framework) with the US to freeze all nuclear weapons-related activities in exchange for the supply of heavy fuel oil, two power-generating reactors and improved bilateral ties, including security assurances.

In December 2002, North Korea restarted its nuclear reactor at Yongbyon, expelled the IAEA inspectors from the country and broke seals and disabled cameras that had been installed by the IAEA to monitor the freeze. On 10 January 2003, North Korea declared its withdrawal from the NPT, claiming immediate efficacy. By early 2005, North Korea announced that it had successfully produced nuclear weapons.

In late February 2003, North Korea restarted its reactor, and on 2 October, the North Korean Foreign Ministry declared that the reprocessing of 8,000 spent fuel rods had been completed "to increase its nuclear deterrent force." By early 2005, various sectors of the US intelligence community estimate that North Korea could have anywhere from 1-15 nuclear weapons.

As of 2005, the status of North Korea's withdrawal from the NPT has not been ascertained.

www.nti.org; www.fas.org; <http://www.ieer.org/op-ed/radio/4nkorea.html>

Nuclear facilities

The status of facilities at the Yongbyon complex are unknown, though these facilities include:

- An atomic reactor, with a capacity of about 5 electrical megawatts, constructed between 1980 and 1987, reportedly capable of expending enough uranium fuel to produce about 7 kilograms of plutonium annually

- two larger (estimated 50 electrical megawatts and 200 electrical megawatts) atomic reactors under construction since 1984; if completed, these plants are capable of producing enough spent fuel annually for 200 kilograms of plutonium, sufficient to manufacture nearly 30 atomic bombs per year.

- a plutonium reprocessing building about 600 feet long and several stories high.

www.fas.org/spp/starwars/crs/IB91141.pdf

It is unclear when North Korea started a uranium enrichment program, though many analysts estimate between 1997-1999.

Kerr, Paul, "N. Korea's Uranium-Enrichment Efforts Shrouded in Mystery," *Arms Control Today*, May 2003.

Uranium Mines

The status of the mines at Pakchon and Pyongsan are unknown.

Cirincione, Joseph. *Dangerous Arsenals, Tracking Arsenals of Weapons*, Carnegie Endowment for International Peace, June 2002, p.253. [http://www.ceip.org/files/projects/npp/resources/DeadlyArsenals/chapters%20\(pdf\)/14-NoKorea.pdf](http://www.ceip.org/files/projects/npp/resources/DeadlyArsenals/chapters%20(pdf)/14-NoKorea.pdf)

2. FISSILE MATERIAL HOLDINGS

Suspected Military Stocks of Fissile Material- 1-2 kg (end of 2003)

Unirradiated Plutonium 15-40

Highly Enriched Uranium (HEU)- unknown

http://www.isis-online.org/mapproject/country_pages/northkorea.html

Spent fuel- 25-30 kilograms of plutonium

<http://www.isis-online.org/publications/dprk/currentandfutureweaponsstocks.html>

3. NUCLEAR ACTIVITIES

Nuclear Cooperation

US: Under the 1994 Agreed Framework, the DPRK was to freeze and eventually dismantle its existing suspect nuclear program, including reactors under construction, as well as its existing reactor and nuclear fuel reprocessing facility. In return, the US was to provide heavy oil shipments, the construction of two light water reactors (LWR) and security assurances.

The agreement was never fulfilled completely by either side; North Korea continued to expand its nuclear program and many shipments of oil were regularly delayed. Furthermore, construction on the LWRs was years behind; ground had only just been broken by the time the Agreed Framework was declared void in 2002. The Clinton administration, which signed the agreement, never codified security assurances; when the Bush administration named North Korea as a possible nuclear target in the 2002 Nuclear Posture Review, the Agreed Framework fell completely apart.

Russia: Russia provided various components of nuclear expertise to North Korea, including as late as 2001, when Russia sent 20 nuclear scientists to North Korea. Russia also assisted North Korea with clean-up and safety after a radioactive material spill by train.

http://www.nti.org/db/profiles/dprk/nuc/ie/NKN_EiussrDI.html

Various: Since its establishment in 1962, North Korea is suspected of (though rarely confirmed) cooperating with many countries on elements of nuclear cooperation, including Iran, Japan, Kazakhstan, Pakistan, Libya, Canada and China. http://www.nti.org/db/profiles/dprk/nuc/ie/NKN_EiotheDI.html

4. INTERNATIONAL NON-PROLIFERATION EFFORTS

Treaties Signed and Ratified, date of deposit

Biological Weapons Convention, 13 March 1987

Nuclear Non-Proliferation Treaty, 12 December 1985*

The DPRK has not signed the IAEA Additional Protocol.

*North Korea withdrew from the NPT in 1993 and later suspended its withdrawal. On January 2003, it declared again its withdrawal from the NPT, claiming immediate efficacy.

Multilateral Groups

Conference on Disarmament

5. POSITIONS TAKEN IN INTERNATIONAL FORA ON VARIOUS ISSUES OF NUCLEAR DISARMAMENT

Nuclear weapons: "The DPRK is left with no other option but to possess a nuclear deterrent in the face of the situation in which the present US administration, being accustomed to rejecting our system, has been attempting to eliminate the DPRK by force while designating it as part of an 'axis of evil' and a target of preemptive nuclear strikes... The nuclear deterrent of the DPRK constitutes a legitimate self-defensive means to counter ever-growing US nuclear threat and aggression against the DPRK and reliably defend sovereignty, peace and security of the country." - **Statement by H.E. Mr. Choe Su Hon to the 59th session of the General Assembly, 27 September 2004.** <http://www.un.org/webcast/ga/59/statements/dprkeng040927.pdf>

Non-proliferation: “If the international community attaches an importance to the non-proliferation of weapons of mass destruction and does not want the existing international agreements on disarmament to be nullified or weakened, it should address the policy on nuclear threat(s) of the nuclear superpower and take the realistic measures to eliminate it.

“It is the consistent position of the DPRK to oppose the proliferation of weapons of mass destruction. If proliferation of weapons of mass destruction is to be prevented, it is necessary, first of all, to prohibit the deployment of weapons of mass destruction including nuclear weapons in many places of the world and eliminate the nuclear threat such as ‘the doctrine of nuclear pre-emptive use.’” - **Statement by Ambassador Pak Gil Yon, to the 59th session of the General Assembly First Committee on Disarmament and International Security, 12 October 2004.**

<http://www.reachingcriticalwill.org/political/lcom/lcom04/statements/DPRK.PDF>

Negative Security Assurances: “Only when nuclear disarmament accompanied by the abolishment (sic) of nuclear weapons is realized can the objective of disarmament be said to have been attained. ...(N)uclear disarmament should therefore be the primary mission in order to ensure the complete elimination of use of nuclear weapons and their total abolishment (sic) and the provision of unconditional nuclear negative assurances for Non-Nuclear Weapon States.” - **Statement by Ambassador Pak Gil Yon, to the 59th session of the General Assembly First Committee on Disarmament and International Security, 12 October 2004.**

<http://www.reachingcriticalwill.org/political/lcom/lcom04/statements/DPRK.PDF>