



FORUM: Disarmament and International Security Committee (GA1)

TOPIC: Addressing DPRK's Uranium Enrichment Program and the Construction of Nuclear Facilities as a Global Instability Factor

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POSITION: Co-Chair

PERSONAL INTRODUCTION

Dear delegates,

My name is Alkistis Sofianou-Christoforou. I'm 17 years old and I am a student at Anavryta Model School. I feel honored to be one of your chairs for this year's conference in the DISEC Committee and I'm very excited to meet you all. I've been a part of the MUN community for 6 years now and I'm always thrilled to participate in any conference I can. Through my many experiences, both as a delegate and a chair, I have been able to see the different aspects of an MUN conference. During those conferences I got to meet new people, help delegates who feel stuck, get inspired but also learn from others. I hope that this Study Guide helps you with your research so you will be fully prepared for a fruitful and exciting debate but I also encourage you to do your own research on the topic as well. If you have any questions don't hesitate to contact me on my e-mail (alkistissc@yahoo.com)!

Best regards,

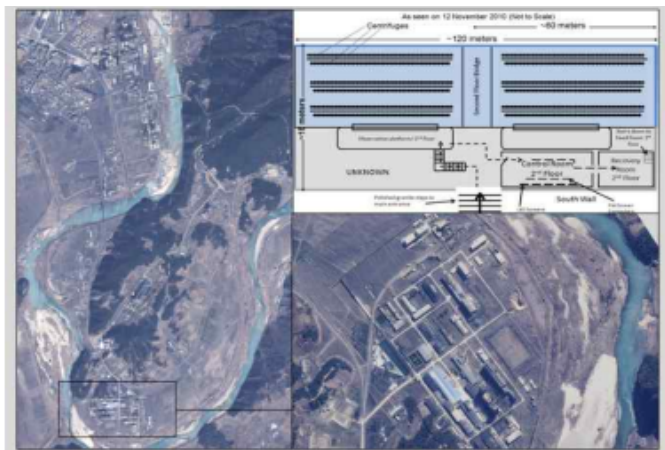
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TOPIC INTRODUCTION

After the collapse of the Soviet Union, the Democratic People's Republic of Korea (DPRK), who relied upon it, faced a significant energy shortage. As a solution to the problem they turned to nuclear power reactors, which use low enriched uranium (LEU) as fuel to generate electricity. That was the starting point of the DPRK's Uranium Enrichment Program (UEP) which later was used for the creation of nuclear weapons.

In 1993, after DPRK's withdrawal from the Nuclear Non-Proliferation Treaty (NPT) the Clinton administration broke the "no direct US-DPRK talks" policy, part of US's foreign policy, and began negotiations for resolving the issue of the DPRK's UEP. Meanwhile, North Korea was experimenting with another nuclear material called "highly enriched uranium" (HEU). North Koreans had started the transition of their plutonium production in Yongbyon facility to a uranium enrichment facility (UEF). The transition from plutonium to uranium was of major importance for two reasons.

Firstly, plutonium is an artificial element that has to be processed before it is ready to use as a nuclear material. North Korea possesses a vast majority of natural uranium ores, meaning that access was easier. Secondly, plutonium requires a large nuclear reactor and a reprocessing facility, making it easily detected by satellites, while uranium can be easily concealed underground or in industrial sites. Since North Korea required discretion and easy access, uranium was ultimately the better option.



Site overview of UEF¹

The necessary HEU technology was supplied to DPRK by Pakistan from the 1990s to the early 2000s and in 1993 in a meeting between Pakistan's Prime Minister and Kim Il Sung, Pakistan also agreed to fund the UEP and provided the equipment for the HEU while North Korea supplied Pakistan with the

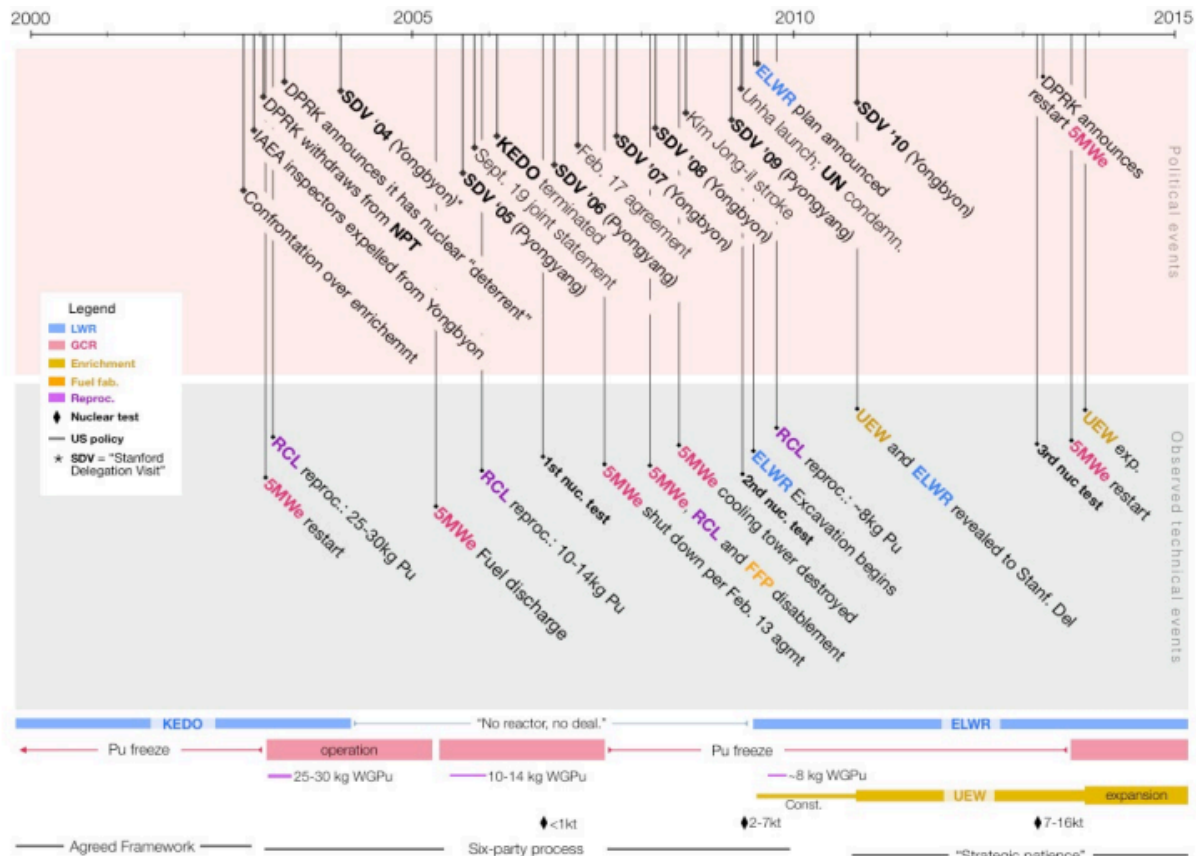
technology to manufacture 1000km range missiles. DPRK insisted that all the technology and resources required for the program and the facility was sourced indigenously however it is believed that Iran is the country which provided North Korea with modern technology for uranium enrichment. The current status of DPRK's UEP cannot be verified with certainty.

North Korea's economy is in a poor state with the Korean Peninsula's security unstable, they rely heavily on nuclear power, not only for electricity but to intimidate in negotiations as well. While, at first, they refused the existence of any nuclear facility, and especially the UEF, which made it harder to estimate DPRK's nuclear power, the country agreed to halt the use of nuclear power in exchange for small light water reactors (LWRs) provided by the US, after the US-DPRK Agreed Framework. However, the AF was broken after negotiations between the US and the DPRK, as one of the United States' policies was the "no US-DPRK talks", collapsed and, since then, the DPRK has continued developing its nuclear programs.

The situation regarding North Korea's growing uranium enrichment plants is alarming to the UN since it delays the UNs 17 Sustainable Development Goals (SDG), especially goals 16 (peace justice and strong institutions) and 17 (partnership for the goals).²

¹ Uranium Enrichment Program: Transactions of the Korean Nuclear Society, <https://www.kns.org/>. Accessed 3 August 2026.

² "The 17 Goals | Sustainable Development." *United Nations*, <https://sdgs.un.org/goals>. Accessed 17 Aug. 2026.



Timeline of nuclear events since the collapse of the Agreed Framework (AF)³

DEFINITION OF KEY TERMS

Fissile Material

“A material capable of nuclear fission-splitting the nucleus (= central part) of an atom”.⁴

Centrifuge

A machine with a part that turns around very quickly to separate substances, for example liquids from solids, by forcing the heavier substance to the outer edge.⁵

³ Agreed Framework: Center for International Security and Cooperation, <https://fsi9-prod.s3.us-west-1.amazonaws.com/>. Accessed 3 August 2026.

⁴ “Oxford Learner’s Dictionaries: Find Definitions, Translations, and Grammar Explanations at Oxford Learner’s Dictionaries.” *Oxford Learner’s Dictionaries | Find Definitions, Translations, and Grammar Explanations at Oxford Learner’s Dictionaries*, <https://www.oxfordlearnersdictionaries.com/>. Accessed 05 Aug. 2026.

⁵ Karwan, Chris. “What Is a Centrifuge?” *New Life Scientific*, 11 June 2021, <https://newlifescientific.com/blogs/new-life-scientific-blog/what-is-a-centrifuge?srsId=AfmBOopwkAmGIW-rHgZTs52n8aGxN6PVjlyOJhejKPUkOAuJ7HPdaN-e>. Accessed 17 Aug. 2026.



Peninsula

“An area of land that is almost surrounded by water but is joined to a larger piece of land”.⁶

Annex II Countries

Annex II countries are industrialized nations (members of the Organisation for Economic Co-operation and Development, OECD) listed under the United Nations Framework Convention on Climate Change (UNFCCC) that are obligated to provide financial resources and technology transfer to developing countries to support climate change mitigation and adaptation efforts.⁷

Veto

The veto in the UN Security Council is the power of the five permanent members (China, France, Russia, the UK, and the US) to unilaterally block any substantive resolution, preventing its adoption, regardless of support from other members.⁸

Panel of Experts (PoE)

A body established by the UNSC to investigate, monitor and report on how countries follow a specific sanction regime.⁹

Highly Enriched Uranium (HEU)

“HEU is more than 20 percent U-235. It’s mostly used in naval propulsion reactors, nuclear weapons, and some research reactors.”¹⁰

Uranium Enrichment Facility/Plant (UEF/UEP)

UEFs are specialized industrial plants that increase U-235 in natural uranium in order to produce HEU.¹¹

⁶ “Oxford Learner’s Dictionaries: Find Definitions, Translations, and Grammar Explanations at Oxford Learner’s Dictionaries.” *Oxford Learner’s Dictionaries | Find Definitions, Translations, and Grammar Explanations at Oxford Learner’s Dictionaries*, <https://www.oxfordlearnersdictionaries.com/>. Accessed 05 Aug. 2026.

⁷ *Unfccc.Int*, <https://unfccc.int/parties-observers>. Accessed 17 Aug. 2026.

⁸ “Veto.” *Cambridge Dictionary*, <https://dictionary.cambridge.org/dictionary/english/veto>. Accessed 17 Aug. 2026.

⁹ “Panel of Experts (UN Sanctions).” *Model Diplomat*, <https://modeldiplomat.com/learn/glossary/panel-of-experts-un-sanctions>. Accessed 06 Aug. 2026.

¹⁰ “Uranium Enrichment, Explained.” *Energy.Gov*, 12 Feb. 2026, <https://www.energy.gov/ne/articles/uranium-enrichment-explained>. Accessed 06 Aug. 2026.

¹¹ “Uranium Enrichment, Explained.” *Energy.Gov*, 12 Feb. 2026, <https://www.energy.gov/ne/articles/uranium-enrichment-explained>. Accessed 06 Aug. 2026.



BACKGROUND INFORMATION

Historical Evolution of DPRK's Nuclear Program

The Democratic People's Republic of Korea is a state that, even while the Soviet Union, who helped them in terms of politics, military and, most importantly, economics, existed, lacked a planned economy. An attempt to establish that was an exhibition about the Peaceful Use of Atomic Energy in the Soviet Union, taking place in Pongbyon in 1958. A year later the Soviet Union provided North Korea with the technical assistance for the peaceful application of nuclear energy, e.g. for electricity in houses, leading to the creation of the Yongbyon Nuclear Scientific Research Centre. By 1965, even as a country facing major struggles due to the consequences of the Korean War and the ongoing Cold War, the DPRK was officially a nuclear state. However, because of that sudden gain in nuclear power, North Korea's nuclear program is now considered a global instability factor.

After the collapse of the Soviet Union in 1991, facing major problems since it relied on it, DPRK used the Yongbyon Nuclear Scientific Research Centre to generate electricity using plutonium. North Koreans soon came to the realization that apart from plutonium, low enriched uranium (LEU) could also be used to generate electricity. However, highly enriched uranium (HEU) can be used to manufacture nuclear weapons, as well. As a now nuclear state, North Korea took advantage of that information and turned the Yongbyon Centre into a Uranium Enrichment Facility (UEF), thus transitioning from plutonium to uranium.

History of International Governance and Monitoring

The first attempt of the DPRK to withdraw from the Non-Proliferation Treaty (NPT) was in 1993 however after negotiations with the USA they decided to suspend their withdrawal. In January of 2003, Pyongyang declared their permanent departure from the NPT. Since the Agreed Framework, North Korea had allegedly stopped working with nuclear power however it was through Dr. Hecker that its formerly concealed uranium enrichment program became known.¹² After North Korea's departure from the NPT, they prohibited the entry of International Atomic Energy Agency's (IAEA's) safeguarding monitors. Ever since then, there is very little information on the DPRK's nuclear program or its uranium stockpile estimates. That makes monitoring and enforcing the dismantling of its nuclear facilities significantly more difficult, leading to the increased threat of North Korea's nuclear power.

¹² Dr. Siegfried S. Hecker is a former Los Alamos National Laboratory director who conducted seven technical visits to North Korea's Yongbyon nuclear complex between 2004 and 2010. During his 2010 visit, North Korean officials showed him a vast, previously secret gas centrifuge facility, providing western intelligence with the first direct proof of their operational uranium enrichment program.

Technical Capabilities and Facility Infrastructure

The Yongbyon Nuclear Complex

The Yongbyon complex remains the centrepiece of North Korea's nuclear production capability, pursuing a dual-track strategy for the production of fissile material – plutonium and enriched uranium. The UEP was constructed inside the old Fuel Fabrication Plant and was unveiled to the public in 2010. Initial observations identified more than 2,000 gas centrifuges thought to be of P2 type, a new model of centrifuge made by Pakistan and specifically used for uranium enrichment.¹³ Its capacity has been greatly increased by expansions such as a second major centrifuge hall. Although Pyongyang initially stated that the UEP was designed to produce Low Enriched Uranium (LEU) fuel for domestic power generation, gas centrifuge cascades can be readily modified to produce Highly Enriched Uranium (HEU) for use in nuclear weapons. The 5 MWe (mega-watt electric) experimental graphite-moderated reactor was the main source of weapon-grade plutonium. The newer Experimental Light Water Reactor (ELWR) when operationally integrated offers additional dual-use capabilities, offering a plausible cover for LEU production while retaining the capability to produce either tritium or plutonium.

Overview of Yongbyon Nuclear Scientific Research Center Area from July 14, 2016¹⁴



Undeclared Facilities and Underground Infrastructure

The existence of clandestine, undeclared enrichment sites outside Yongbyon is a major source of global instability. Reports from intelligence assessments and satellite imagery have pointed to secondary facilities, particularly the site at Kangson, believed to be the location of centrifuge halls or component manufacturing facilities. Centrifuge facilities, unlike reactors, have small physical footprints, low thermal/infrared signatures and low

¹³ Dr. Siegfried S. Hecker. "What I Found In North Korea." *Foreign Affairs*, 9 Dec. 2010, [fsi9-prod.s3.us-west-1.amazonaws.com/s3fs-public/What_I_Found_in_North_Korea.pdf](https://prod.s3.us-west-1.amazonaws.com/s3fs-public/What_I_Found_in_North_Korea.pdf).

¹⁴ Yongbyon Nuclear Scientific Research Centre: 48North, <https://www.38north.org/>. Accessed 3 August 2026.



electrical requirements which allows the DPRK to build redundant, underground and heavily fortified enrichment plants.

Centrifuge Technology and Production Capacity

North Korea's centrifuge technology has quickly progressed from imported designs to a domestic manufacturing industrial base. The DPRK has progressed from early P1/P2 centrifuge designs to more advanced maraging steel or carbon-fiber rotor designs. These improvements increase the Separative Work Units (SWU) - the measure of effort required to separate uranium isotopes - thus allowing greater enrichment throughput in less space. Yongbyon alone is believed to have an enrichment capacity of more than 8,000–10,000 SWU a year.¹⁵ This gives North Korea the ability to continue increasing its stockpile of HEU, producing material for dozens of nuclear warheads a year. A number of domestic mining and conversion facilities, such as the Pyongsan Uranium Mine and Concentration Plant, provide a steady supply of uranium ore concentrate (yellowcake) and uranium hexafluoride feed gas for the enrichment program.

Recent Operational Expansion, Institutionalization and Geopolitical Stalemate

North Korea's nuclear program has transformed into an operation of continuous industrial production rather than episodic testing. Independent intelligence assessments and reports from the International Atomic Energy Agency (IAEA) suggest that known nuclear enrichment facilities such as the Yongbyon Nuclear Complex continue to operate alongside secret sites such as the Kangson facility. The country has expanded its geographic footprint by adding new nuclear production plants with sophisticated facilities featuring crowded arrays of centrifuges capable of generating much more Highly Enriched Uranium. It has been estimated by independent experts in arms and non-proliferation monitoring that North Korea has energy to produce approximately 50-90 nuclear weapons in terms of fissile material.¹⁶ The North Korean leadership showcased their intention of producing even more in the future. To solidify its nuclear stance, the DPRK has amended its constitution to allow for the execution of automated nuclear strikes under certain conditions. Moreover, North Korea does not agree to denuclearization attempts or proposals. Following the Russian veto to the UN Panel of Experts in 2024, which was

¹⁵ Diepen, Vann H. Van, et al. "A Closer Look at North Korea's Enrichment Capabilities and What It Means - 38 North: Informed Analysis of North Korea." *38 North*, 18 Sept. 2024, www.38north.org/2024/09/a-closer-look-at-north-koreas-enrichment-capabilities-and-what-it-means/

¹⁶ Diepen, Vann H. Van, George Grech, et al. "Estimating North Korea's Nuclear Stockpiles: An Interview with Siegfried Hecker - 38 North: Informed Analysis of North Korea." *38 North*, 30 Apr. 2021, www.38north.org/2021/04/estimating-north-koreas-nuclear-stockpiles-an-interview-with-siegfried-hecker/.



backed by China, the system of sanctions and supervisory mechanisms became mostly useless as the veto dissolved the primary 14-year international body responsible for tracking and reporting North Korean sanctions evasion, illegal procurement networks, and military proliferation. Therefore, the trilateral cooperation between the US, South Korea, and Japan was improved with the means of intelligence exchange, joint military exercises and a strengthened presence of the US troops in the area.

DPRK's Nuclear Program as a Global Instability Factor

The decision made by North Korea to abandon the NPT in 2003 in combination with its unmonitored enrichment of material suitable for making nuclear weapons resulted in the extremely difficult situation concerning the maintenance of international legal regimes necessary for combatting the proliferation of nuclear weapons. The given situation contributes to a serious change in the affairs of neighboring states (South Korea, Japan, etc.) enhancing their vigilance concerning the use of nuclear weapons and changes the process of militarization of the region and consideration of formulations of independent nuclear solutions for the local countries. Pyongyang's intention to develop tactical nuclear arms adds to this grave danger of possible error, escalation and accidental war in North-East Asia. However, the situation with secret acquisitions and the existing mechanisms of technology transfer raises other threats connected with the possibility of transfers of dual-use technology as well as fissile material.

MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

Democratic People's Republic of Korea (DPRK)

The nuclear weapons stockpile and the Uranium Enrichment Program of the DPRK are some of the non-negotiable means of regime survival and defense, where the use of fissile materials is used to compensate for the weaknesses of their conventional forces, deter foreign interventions and ensure international recognition as an everlasting nuclear nation. The North Koreans have been increasing their production capacity of Highly Enriched Uranium (HEU) through expansion of the Yongbyon Nuclear Scientific Research Center with centrifuge facilities, and running covert facilities such as Kangson to produce weapon grade HEU for their tactical warheads and ballistic missiles. The regime has officially put this into practice through changes to its constitution to acknowledge its status as a nuclear power and making laws to authorize nuclear pre-emptive strike in case the regime feels threatened, while forging strategic alliances with countries like Russia to protect itself from international pressure against any denuclearization effort.



Japan

Japan regards North Korea's nuclear and enrichment activities as a national security emergency since they exist directly inside the target range of its short- to intermediate-range missiles. Japan places a great reliance on trilateral defence cooperation with the US and South Korea and has also invested in missile defence systems and upheld strict international norms on non-proliferation.

People's Republic of China (PROC)

China serves as the primary economic lifeline and strategic neighbor of North Korea, emphasizing the need for stability along the border. Following the Soviet Union's collapse, China emerged as the main economic and strategic backer of North Korea to prevent a unified Korea backed by the US. Beijing is now responsible for providing North Korea with the much-needed economic support through which over 90% of North Korea's business is conducted,¹⁷ while also protecting the regime, through its UN Security Council veto power, from harsh international sanctions. Even as it formally denounces North Korea's nuclear tests and violations of its non-proliferation commitments to stop arms races in the region and curb the movement of American military presence close to its land, it effectively blocks political and economic sanctions that could destabilize the regime in Pyongyang.

Republic of Korea (ROK)

Traditionally, Korea was a unified nation until it was divided in 1945 into a Soviet-backed North Korea and US-backed South Korea. The Korean War of 1953 resulted in an armistice agreement rather than a peace agreement, putting the two countries in a constant state of war. Efforts toward diplomacy in the past have led to increased hostilities, including the development of a stronger nuclear program in the north while also naming South Korea their main enemy. As the country is located on the front line of nuclear conflicts, the Republic of Korea faces a security threat due to the development of missiles and warheads by the DPRK. South Korea tries to maintain an efficient defensive position with US forces while developing its own military capabilities.

Russian Federation

Russia has a multifaceted historical and strategic relationship with North Korea, acting as a permanent member of the UN Security Council with veto power, as well as being involved in trade and defense cooperation. Moscow acts against the US-led containment, actions countering the influence of the US in North-East Asia and hindering efforts for establishing consensus on sanctions on the international

¹⁷ "The China-North Korea Relationship." *Council on Foreign Relations*, Council on Foreign Relations, www.cfr.org/backgrounders/china-north-korea-relationship. Accessed 24 Aug. 2026.



level. After signing the Comprehensive Strategic Partnership Treaty of 2024, Russia has progressively protected North Korea through UN vetoes on the organization's inspection system. At the same time they allegedly gave technical assistance on rocket systems in space launches, missile accuracy, and dual technologies which can be used in the nuclear industry. Military cooperation between Russia and North Korea intensified immensely owing to the ongoing war in Ukraine. In return for millions of artillery rounds,¹⁸ short-range ballistic missiles such as the KN-23¹⁹ and North Korean soldiers serving Russian war campaigns, Russia offers vital fuel, financial aid and support to North Korea.

United States of America (USA)

The relationship of the USA and DPRK in history has always fluctuated between temporary agreements and prolonged containment, due to inherent structural distrust. In cases when early agreements, such as the 1994 Agreed Framework, collapsed over the enrichment programs and issues of verification, the United States resorted to "no talks" policy, avoiding high-level diplomacy until there was a willingness on the part of North Korea to denuclearize. However, the underlying conflict is still the same with the USA wanting a "denuclearization-first" strategy, while North Korea sees its nuclear weapons as its only protection against US pressure and drills. The US is also explicitly committed to both of its allies in the region, South Korea and Japan, with its foreign policy's objective being to ensure non-proliferation of nuclear weapons, implement bilateral and multilateral sanctions, and achieve the long-term goal of nuclear disarmament on the Korean peninsula in a verified manner.

Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)

The Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) serves a crucial function in relation to North Korea due to the fact that it maintains an International Monitoring System that is capable of detecting any nuclear explosion taking place anywhere in the world. Since North Korea remains the only nation to have tested nuclear weapons in the 21st century, the comprehensive system of seismic, infrasound and radionuclide detectors maintained by the CTBTO played a pivotal part in detecting the nuclear test explosions carried out by Pyongyang in the Punggye-ri test site. Even though North Korea has not been a signatory to the treaty,

¹⁸ Cafarella, Jennifer. "North Korea Joins Russia's War against Ukraine: Operational and Strategic Implications in Ukraine and Northeast Asia." *Institute for the Study of War*, 5 Dec. 2025, understandingwar.org/research/russia-ukraine/north-korea-joins-russias-war-against-ukraine/.

¹⁹ Cafarella, Jennifer. "North Korea Joins Russia's War against Ukraine: Operational and Strategic Implications in Ukraine and Northeast Asia." *Institute for the Study of War*, 5 Dec. 2025, understandingwar.org/research/russia-ukraine/north-korea-joins-russias-war-against-ukraine/.

the information gathered by the CTBTO helps in providing scientific confirmation of the nuclear test explosions conducted by the DPRK.

International Atomic Energy Agency (IAEA)

The IAEA is the technical agency of the United Nations entrusted with nuclear verification and the safeguarding of the principles of non-proliferation. While international inspectors were forced to leave North Korea in 2009, the IAEA continues to monitor the development of the Yongbyon nuclear complex and other unknown sites in North Korea by means of sophisticated satellite imagery, radiation monitoring, and open source intelligence. Through these remote means, the IAEA has confirmed the fast-paced growth of the uranium enrichment plant at Yongbyon, which has expanded to double its capacity in 2013. The agency has kept an eye on the constant operations at the uranium mine in Pyongsan to confirm the continuity of the local supply chain. Moreover, the IAEA has also observed the operation of the 5MWe reactor and the Radiochemical Laboratory to identify the plutonium production cycle.

United Nations Security Council (UNSC)

The UN Security Council is the principal legal organ that has been given the responsibility of keeping peace and ensuring non-proliferation compliance. Through a number of enforceable UN Security Council Resolutions, such as the UNSC Resolution 1718 and 2397, the UN Security Council has taken measures against the nuclear program of the DPRK by introducing a number of sanctions on trade with the country, freezing its assets, limiting dual-use technology imports and reducing its access to the banking sector globally.

TIMELINE OF EVENTS

DATE	EVENT
1961	The Yongbyon Nuclear Scientific Research Center was constructed with the Soviet Union's help
12 th of March 1993	North Korea announced its intention to leave the NPT and ending up suspending it
21 st of October 1994	The Agreed Framework is created
16 th of October 2002	The US confronts DPRK about secret operations and the Agreed Framework collapses
10 th of January 2003	DPRK withdraws from the NPT
9 th of October 2006	DPRK's first nuclear test



2007-2009	They uranium enrichment plant is constructed at the Yongbyon Nuclear Scientific Research Center
25 th of May 2009	DPRK's second nuclear test
10 st of November 2010	The Yongbyon Centrifuge Facility is revealed to the public
12 th of February 2013	DPRK's third nuclear test
6 th of January 2016	DPRK's fourth nuclear test
9 th of September 2016	DPRK's fifth nuclear test, conducted on North Korea's National Foundation Day
3 th of September 2017	DPRK's sixth nuclear test
May 2018	The 'Kangson' secret enrichment site is exposed
9 th of September 2022	The Supreme's People Assembly passes a pre-emptive nuclear doctrine law
27 th of September 2023	DPRK amends Article 58 from its national constitution leading to the constitutional enshrining of nuclear capabilities
28 st of March 2024	Russia exercised its veto in the UN Security Council to block the annual mandate renewal of the UN Panel of Experts
13 th of September 2024	Images show North Korean leader Kim Jong Un inspecting the Nuclear Weapons Institute (NWI) and the production base of weapons-grade nuclear materials



North Korea's leader Kim Jong Un seen inspecting the NWI²⁰

RELEVANT UN TREATIES, CONVENTIONS AND RESOLUTIONS

Resolution 1718, 14 October 2006

The resolution stated that all acts pertaining to North Korea's nuclear activity, such as nuclear tests, ballistic missile and nuclear programs, as well as any other weapon of mass destruction, must be immediately halted. Also, the resolution called for North Korea to retract their withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons, and to accept inspections and sanctions, such as arms embargos and luxury goods' trade regulations. North Korea rejected the resolution and since 2006, has conducted 5 more nuclear tests.

Resolution 1874, 12 June 2009

The resolution condemned the nuclear tests that were conducted on 25 May 2009 and prohibited nuclear weapons as well as any additional testing. The resolution further calls for the full implementation of resolution 1718 and adds that countries can legally seize and destroy illicit North Korean cargo (of items listed in resolution 1718) as well as refuse fuel to North Korean ships. Lastly, it requests that North Korea join the Comprehensive Nuclear-Test-Ban Treaty. Following the resolution, countries started inspecting North Korean ships, allowing the confiscation and disposal of illicit cargo. North Korean ships began refuelling covertly at sea. North Korea nevertheless resumed nuclear testing. Most significantly, this resolution

²⁰ Nuclear Weapons Institute: CBS News, <https://www.cbsnews.com/>. Accessed 3 August 2026.

established the UN Panel of Experts (PoE), which was responsible for looking into and disclosing DPRK's activities.

Resolution 2321, 30 November 2016

The resolution 2321, (similar to Resolution 2270) condemned DPRK nuclear tests (especially the 6th of January 2016 and the 9th of September 2026 nuclear tests) and missile launches, while also implementing a strict arms embargo, as well as mandatory cargo inspections and an aviation fuel ban. Export restrictions, maritime, diplomatic and financial sanctions are also mentioned in the resolution alongside an international ban of scientific cooperation with DPRK. These resolutions led to the reduction of the DPRK's illegal exports, the increase of global monitoring and the diplomatic isolation of the DPRK. Unfortunately, North Korea continued conducting nuclear tests.

Resolutions 2371 and 2397

In these resolutions, the July 3rd, July 28th and November 28th ICBM launches were called a threat to humanity and DPRK was again asked to abandon all nuclear activities. More sanctions were imposed on the DPRK (for imports and exports) and overseas labor was limited. Also, the DPRK was banned from deploying chemical weapons. The implementation of these resolutions, caused North Korea to resort to illegal smuggling, especially of coal and seafood. Even though North Korea has not stopped developing nuclear energy, there has not been any reported nuclear test since September 2017.

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

The Six-Party Talks

Starting in 2003, the Six-Party Talks were a series of diplomatic negotiations that included North Korea, South Korea, the United States, China, Russia, and Japan. The objective of the mechanism was to establish conditions for providing Pyongyang with economic assistance, energy supplies and security guarantees in exchange for stopping its nuclear program, but talks failed in 2009 when North Korea abandoned the mechanism.

Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

A worldwide treaty that seeks to stop the proliferation of atomic bombs and nuclear weapons technology, encourage coordination in dealing with nuclear energy, and achieve nuclear disarmament. It establishes a verification system managed by the International Atomic Energy Agency (IAEA). The goal is to make sure that non-nuclear states do not produce or obtain atomic weapons while they maintain their right to use nuclear technology in a safe way. North Korea joined NPT in 1985, but after IAEA officials found inconsistencies in North Korea's declared stock of plutonium, the country stated its plans to withdraw. North Korea officially left the



NPT in 2003, becoming the first and only country to abandon the treaty and making its nuclear activities completely unregulated internationally.

Joint Declaration on the Denuclearization of the Korean Peninsula

The North-South bilateral agreement outlines that both parties would not develop, create, acquire, own, handle, save, manufacture or deploy any nuclear weapon. It is mandatory that both countries do not have fission or uranium enrichment plants. Its purpose was to neutralize nuclear threats in the region and initiate mutual verification inspections in order to create peace on the Korean peninsula at the end of the Cold War. The agreement failed because mutual verification was never agreed upon and North Korea clandestinely acquired abilities to obtain HEU through overseas hidden markets.

Agreed Framework Between the United States of America and the Democratic People's Republic of Korea

The bilateral Framework included North Korea's commitment to halt its functioning graphite-moderated plutonium plants and reprocessing of spent fuel at Yongbyon, which was to be supervised by IAEA. In exchange for this, the USA committed to help construction of two nuclear reactors resistant to proliferation and provide heavy oil supplies. Its aim was to stop North Korea in its race to nuclear plutonium-based weapons and establish economic and diplomatic relations. This framework brought a halt to plutonium production at Yongbyon for nearly ten years. Nevertheless, it ultimately collapsed in October 2002, when American intelligence revealed North Korea's secret program of uranium enrichment, making the agreement null and void and forcing North Korea to leave the NPT.

Comprehensive Nuclear-Test-Ban Treaty (CTBT)

A multilateral treaty banning all nuclear explosions for both military and peaceful purposes in all media. Its purpose is to prohibit further development of nuclear weapons by forbidding any nuclear testing anywhere on the planet. Though signed by 187 states, the CTBT has not yet entered into force because of the non-participation of the "Annex 2" states, which possess nuclear weapons, including among others North Korea, the United States, China, Iran, and Israel. Since the start of the 21st century North Korea is the only state to have triggered a nuclear explosion.

POSSIBLE SOLUTIONS

Investigating Suppliers and Imposing Sanctions

North Korea is able to obtain the materials required to procure dual-use technology for uranium enrichment, even after the UN imposed a significant number of restrictions on the country. The UNSC with the 1718 Sanctions Committee and



international monitoring mechanisms and PoE must look into and identify the DPRK's illicit acquisition networks. Any nations and organisations that engage in illicit behaviour with the DPRK will face severe penalties and financial sanctions and cargo seizure.

Strengthening the Panel of Experts (PoE)

The Panel of Experts is the most important tool the international community has for understanding more about the way the DPRK operates. The UN must focus on facilitating the panel's work by setting clear goals and easing the accessibility to information that may help them identify the cause of the issue. The PoE should be the one in charge of an internationally shared database where every nation, company and organization can report suspicious activity, such as maritime activity, shipments, bank transactions and satellite information. The PoE can be further funded by the Member Nations and the panel's reports should be more frequent rather than annually and be reviewed by a special team organised by the UNSC.

Limiting Access to Materials

Limiting the materials used to produce enhanced uranium must be the UN's main goal. This can be accomplished by restricting exports of materials like maraging steel or high-strength aluminium, by passing resolutions that will be implemented as a law and will check these materials when appearing on a member state's national export list. Additionally, businesses should be instructed on how to recognise and to avoid suspicious orders coming from illicit trafficking groups. This will force North Korea to rely on inferior substitutes, interfering with the quality, quantity and severity of their projects.

Creation of a shared database

Member States should be advised to use a shared database, where they will exchange vital information concerning nuclear materials and programs. For instance, if a company or marines have located suspicious activity from a shipment or a vessel, they should alert the responsible mechanism under which the database operates and the relevant data will be uploaded to the database for research to be conducted and an alert to be sent to nearby ports and businesses. Through this database, countries can share any activity that could be potentially linked with the DPRK's nuclear activity. For the inspection of shipments, a special group should be formed, so there will be transparency among nations about their technological and scientific whereabouts.

Satellite Monitoring of Cargo and Naval Patrols

Establishing a body operating under the UN's supervision which will strictly monitor the movement of North Korean vessels transporting materials for uranium



enhancement assures that North Korea will have to cut down the illicit activity and smuggling and be aware of the ports and marines on their network. In addition, satellites will monitor maritime activity in areas near the DPRK and report through a shared database to all Member States and alert them of suspicious movements. This can be achieved, also, through naval patrols from all neighboring countries and frequent inspections of cargo ships and vessels.

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