

# CVMUN20 UNGA-DISEC BG

## **History of DISEC**

The United Nations Disarmament and International Security Committee (DISEC) was the first General Assembly established when the charter of the United Nations was signed in 1945. This committee works closely with the United Nations Disarmament Commission and the Geneva-based Conference on Disarmament. In the past, DISEC has dealt with issues such as nuclear testing and proliferation, transparency in armaments, weapons of mass destruction, prevention of an arms race in outer space, and conventional weaponry. Although DISEC cannot directly advise the decision-making process of the Security Council, the fourth chapter of the UN Charter explains that DISEC can suggest specific topics for the Security Council consideration. The United Nations has a long history of monitoring and prohibiting chemical and biological weapons. The Geneva Convention of 1925 responded to the chemical arms race witnessed during the Great War. The Geneva Protocol (The Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare) prohibited the use of such weapons in international armed conflicts and was registered by the UN's predecessor, the League of Nations. By the end of the century, the Chemical Weapons Convention (CWC) was adopted by the Conference on Disarmament in Geneva in 1992. Since DISEC is a General Assembly Committee, they do not have the mandate to deploy a mission in the fight against international terrorism. To stay within their competence, it focuses on the establishment of conventions and treaties to prevent terrorist attacks and the use of weapons for terrorist issues. In line with that, it is important to notice DISEC can only consider matters of international security, in case these issues are not already under scrutiny by the Security Council. DISEC was formed to respond to the need for an international forum to discuss issues of peace and security among members of the international community. According to the UN Charter, the purpose of DISEC in the General Assembly is to establish "general principles of cooperation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments" and also to give "recommendations with regard to such principles to the Members or to the Security Council." Although DISEC cannot directly advise the decision-making process of the Security Council, the fourth chapter of the UN Charter explains that DISEC can suggest specific topics for the Security Council consideration. Aside from its role in the General Assembly, DISEC is also an institution of the United Nations Office for Disarmament Affairs (UNODA), formally named in January 1998 after the Secretary-General's second special session on disarmament in 1982. The UNODA is concerned with disarmament at all levels—nuclear weapons, weapons of mass destruction, and conventional weapons—and assists DISEC through its work conducted in the General Assembly for substantive norm-setting support in order to further its disarmament initiatives

# **Nuclear weapon states**

The nuclear-weapon states (NWS) are the five states—China, France, Russia, The United Kingdom, and the United States—officially recognized as possessing nuclear weapons by the NPT. The treaty legitimizes these states' nuclear arsenals but establishes they are not supposed to build and maintain such weapons in perpetuity. In 2000, the NWS committed themselves to an “unequivocal undertaking to accomplish the total elimination of their nuclear arsenals.” Because of the secretive nature with which most governments treat information about their nuclear arsenals, most of the figures below are best estimates of each nuclear-weapon state's nuclear holdings, including both strategic warheads and lower-yield devices referred to as tactical weapons.

China

- About 320 total warheads.

France:

- About 290 total warheads.

Russia:

- March 2020 New START declaration: 1,326 strategic warheads deployed on 485 intercontinental ballistic missiles, submarine-launched ballistic missiles, and strategic bombers
- The Federation of American Scientists (FAS) estimates approximately 4,315 nuclear warheads, including 1,570 deployed offensive strategic warheads (with 870 in storage), 1,875 non-strategic warheads, and 2,060 additional retired warheads awaiting dismantlement, as of January 2020.

United Kingdom:

- About 215 strategic warheads, of which an estimated 120 are deployed and 95 are in storage. The United Kingdom possesses a total of four Vanguard-class Trident nuclear-powered ballistic missile submarines, which together form its exclusively sea-based nuclear deterrent.

United States:

- March 2020 New START declaration: 1,373 strategic nuclear warheads deployed on 655 intercontinental ballistic missiles, submarine-launched ballistic missiles, and strategic bombers.
- The United States also has an estimated 150 B-61 nuclear gravity bombs that are forward-deployed at six NATO bases in five European countries: Aviano and Ghedi in Italy; Büchel in Germany; Incirlik in Turkey; Kleine Brogel in Belgium; and Volkel in the Netherlands. The total estimated U.S. B-61 stockpile amounts to 230.
- FAS estimates approximately 3,800 stockpiled warheads and 2,000 retired warheads awaiting dismantlement, for a total of 5,800 warheads as of early 2020

# **Nuclear Non-proliferation Treaty**

The most important document regarding nuclear weapons is unquestionably the Treaty on the Non-proliferation of Nuclear Weapons (NPT), which entered into force on March 5, 1970. 190 states are currently signed onto the NPT,

except for India, Israel, Pakistan, South Sudan, and North Korea, which originally signed the treaty but withdrew in 2003. Thus, the NPT is the most widely adhered to multilateral disarmament agreement. The NPT defines the US, Russia, UK, France and China as nuclear-weapon states and prohibits them from transferring nuclear weapons, other nuclear explosive devices, or nuclear technology to any non-nuclear weapon state. Non-nuclear-weapon states are prohibited from acquiring or producing nuclear weapons or other nuclear explosive devices.

#### **Non-NPT Nuclear Weapons Possessors:**

- India, Israel, and Pakistan never joined the NPT and are known to possess nuclear weapons.
- India first tested a nuclear explosive device in 1974. That test spurred Pakistan to ramp up work on its secret nuclear weapons program.
- India and Pakistan both publicly demonstrated their nuclear weapon capabilities with a round of tit-for-tat nuclear tests in May 1998.
- Israel has not publicly conducted a nuclear test, does not admit or deny having nuclear weapons, and states that it will not be the first to introduce nuclear weapons in the Middle East. Nevertheless, Israel is universally believed to possess nuclear arms, although it is unclear exactly how many.

#### **States that Declared Their Withdrawal from the NPT:**

North Korea joined the NPT as a non-nuclear weapon state but announced its withdrawal from the NPT in 2003 --a move that has not been legally-recognized by the other NPT member states. North Korea has tested nuclear devices and nuclear-capable ballistic missiles. Uncertainty persists about how many nuclear devices North Korea has assembled.

North Korea:

- Estimated as of January 2020 to have approximately 30-40 warheads.
- While there is a high degree of uncertainty surrounding North Korea's fissile material stockpile and production, particularly on the uranium enrichment side, North Korea is estimated to have 20-40 kilograms of plutonium and 250-500 kilograms of highly enriched uranium. The estimated annual production of fissile material is enough for 6-7 weapons.
- North Korea operates its 5-megawatt heavy-water graphite-moderated reactor to extract plutonium for its nuclear warheads and has done so on an intermittent basis since August 2013. There has also been intermittent activity at North Korea's reprocessing facility since 2016, indicating that Pyongyang has likely separated plutonium from the reactor's spent fuel.
- North Korea unveiled a centrifuge facility in 2010. It is likely that Pyongyang is using that facility to produce highly-enriched uranium for weapons. U.S. intelligence suggests that there are several additional centrifuge facilities in North Korea.

## **Comprehensive Test Ban Treaty**

In 1996, the Comprehensive Nuclear-Test-Ban Treaty (CTBT), a legally binding global ban on nuclear explosive testing, was opened for signature. The CTBT does not allow states without nuclear programs to

advance their nuclear capabilities while allowing nuclear weapon states to maintain their nuclear arsenals. It also prevents states with established nuclear capabilities from testing the performance of nuclear weapon designs they have not yet tested and constrains regional and international arms races. The CTBT includes a comprehensive verification regime with 337 monitoring stations to detect signs of nuclear explosions and share these detections with the member states.

However, the CTBT has not actually been entered into force yet. Only 36 of the 44 nations whose ratifications are required by the treaty for it to enter into force have ratified it. China, North Korea, Egypt, India, Iran, Israel, Pakistan and the United States have yet to ratify the treaty. Because the CTBT is imperative in the effort to stop the development of nuclear weapons, as it prohibits all nuclear tests, the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) was established in 1996 to promote the treaty.

## **Nuclear Weapons Free Zone**

A nuclear-weapon-free zone (NWFZ) is a specified region in which countries commit themselves not to manufacture, acquire, test, or possess nuclear weapons. Five such zones exist today, with four of them spanning the entire Southern Hemisphere. The regions currently covered under NWFZ agreements include Latin America (the 1967 Treaty of Tlatelolco), the South Pacific (the 1985 Treaty of Rarotonga), Southeast Asia (the 1995 Treaty of Bangkok) Africa (the 1996 Treaty of Pelindaba) and Central Asia (the 2006 Treaty of Semipalatinsk).

### **Background**

Initial efforts to create an area free of nuclear weapons began in the late 1950s with several proposals to establish such a zone in Central and Eastern Europe. Poland offered the first proposal-named the Rapacki Plan after the Polish foreign minister-in 1958. The Rapacki Plan sought to initially keep nuclear weapons from being deployed in Poland, Czechoslovakia, West Germany, and East Germany, while reserving the right for other European countries to follow suit. The Soviet Union, Sweden, Finland, Romania, and Bulgaria also floated similar proposals. All these early efforts, however, floundered amidst the U.S.-Soviet superpower conflict, although the Rapacki Plan would serve as a model to the nuclear-weapon-free zones that were eventually set up in other regions of the globe.

Article VII of the nuclear Nonproliferation Treaty (NPT), which entered into force in 1970, affirms the right of countries to establish specified zones free of nuclear weapons. The UN General Assembly reaffirmed that right in 1975 and outlined the criteria for such zones. Within these nuclear-weapon-free zones, countries may use nuclear energy for peaceful purposes.

## **JCPOA(IRAN NUCLEAR DEAL):**

The Joint Comprehensive Plan of Action (JCPOA) is a detailed, 159-page agreement with five annexes reached by Iran and the P5+1 (China, France, Germany, Russia, the United Kingdom, and the United States) on July 14, 2015. The nuclear deal was endorsed by UN Security Council Resolution 2231, adopted on July 20, 2015. Iran's compliance with the nuclear-related provisions of the JCPOA will be verified by the International Atomic Energy Agency (IAEA) according to certain requirements set forth in the agreement. On May 8, 2018, President Trump announced that the United States would withdraw from the JCPOA and reinstate U.S. nuclear sanctions on the Iranian regime.

## **FMCT(FISSILE MATERIAL CUT OFF TREATY)**

A fissile material cut-off treaty (FMCT) is a proposed international agreement that would prohibit the production of the two main components of nuclear weapons: highly-enriched uranium (HEU) and plutonium. Discussions on this subject have taken place at the UN Conference on Disarmament (CD), a body of 65 member nations established as the sole multilateral negotiating forum on disarmament. The CD operates by consensus and is often stagnant, impeding progress on an FMCT.

Those nations that joined the nuclear Nonproliferation Treaty (NPT) as non-weapon states are already prohibited from producing or acquiring fissile material for weapons. An FMCT would provide new restrictions for the five recognized nuclear-weapon states (NWS—United States, Russia, United Kingdom, France, and China), and for the four nations that are not NPT members (Israel, India, Pakistan, and North Korea).

### **Background**

Efforts to curb the spread of nuclear material and technology began only a short time after the world was introduced to the destructive potential of atomic weaponry. In 1946 the Acheson-Lilienthal Report, authored in part by Manhattan Project physicist J. Robert Oppenheimer, advocated for an Atomic Development Agency to regulate fissile material and ensure that state rivalries over the technology did not occur. Ultimately, neither Dean Acheson nor David Lilienthal presented the U.S. plan to the United Nations Atomic Energy Commission (UNAEC). Instead, Bernard Baruch presented the Baruch Plan, which also would have established an Atomic Development Authority that answered to the UN Security-Council. The plan called for the United States to disassemble its nuclear arsenal, but only after an agreement had been reached assuring the United States that the Soviets would not be able to acquire a bomb. The plan failed to achieve consensus within the UNAEC.

Much later, UN resolution 78/57 L, which passed unanimously in 1993, called for a “non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.”

In March 1995, the CD took up a mandate presented by Canadian Ambassador Gerald Shannon. The Shannon Mandate established an ad hoc committee that was directed to negotiate an FMCT by the end of the 1995 session. A lack of consensus over verification provisions, as well as desires to hold parallel negotiations on outer space arms control issues, prevented negotiations from getting underway. China and

Russia articulated a desire to hold parallel negotiations on Preventing an Arms Race in Outer Space (PAROS), a point which has further stalled efforts to begin FMCT negotiations.

## **NUCLEAR SECURITY IN THE MIDDLE EAST**

Of all the calamities that have caused mass death and destruction in the Middle East in recent years—including civil war, terrorism, ethnic cleansing, cholera, and famine—none is more potentially threatening to human life than the danger of nuclear power.

Several countries in the region, including Egypt, Iran, Jordan, Kuwait, Qatar, Saudi Arabia, Turkey, and the United Arab Emirates, see nuclear energy as a long-term solution to their dependence on fossil fuel. In the UAE, the construction of the first nuclear power plant, the Barakah, is complete and will begin operating next year. In Turkey, the construction of the Akkuyu power plant, to be built, owned, and operated by Russia's Rosatom, is ongoing despite political hiccups. Jordan also signed a deal with Rosatom to build the country's first nuclear power plant by 2023. Egypt's 2015 deal with Rosatom aims to build four nuclear reactors in the next twelve years. And Saudi Arabia has an ambitious plan to build sixteen reactors by 2040.

### **IRAN**

Several U.N. Security Council resolutions adopted between 2006 and 2010 required Iran to cooperate fully with the International Atomic Energy Agency's (IAEA's) investigation of its nuclear activities, suspend its uranium enrichment program, suspend its construction of a heavy-water reactor and related projects, and ratify the Additional Protocol to its IAEA safeguards agreement. Iran did not comply with most of the resolutions' provisions. However, Tehran has implemented various restrictions on, and provided the IAEA with additional information about, its nuclear program pursuant to the July 2015 Joint Comprehensive Plan of Action (JCPOA), which Tehran concluded with China, France, Germany, Russia, the United Kingdom, and the United States. On the JCPOA's Implementation Day, which took place on January 16, 2016, all of the previous resolutions' requirements were terminated. The nuclear Nonproliferation Treaty (NPT) and U.N. Security Council Resolution 2231, which the Council adopted on July 20, 2015, compose the current legal framework governing Iran's nuclear program.

Iran ratified the nuclear Nonproliferation Treaty (NPT) in 1970. Article III of the treaty requires non-nuclear-weapon states-parties to accept comprehensive International Atomic Energy Agency (IAEA) safeguards; Tehran concluded a comprehensive safeguards agreement with the IAEA in 1974. In 2002, the agency began investigating allegations that Iran had conducted clandestine nuclear activities; the IAEA ultimately reported that some of these activities had violated Tehran's safeguards agreement. Following more than three years of investigation, the IAEA Board of Governors reported the matter to the U.N. Security Council in February 2006. Since then, the council adopted six resolutions requiring Iran to take steps to alleviate international concerns about its nuclear program. This report provides a brief overview of Iran's nuclear program and describes the legal basis for the actions taken by the IAEA board and the Security Council.

Whether Iran has violated the NPT is unclear. The treaty does not contain a mechanism for

determining that a state-party has violated its obligations. Moreover, there does not appear to be a formal procedure for determining such violations. An NPT Review Conference would, however, be one venue for NPT states-parties to make such a determination.

The U.N. Security Council has never declared Iran to be in violation of the NPT; neither the council nor the U.N. General Assembly has a responsibility to adjudicate treaty violations.

## TIMELINE AND KEY EVENTS

In 2015, Iran agreed a long-term deal on its nuclear programme with a group of world powers known as the P5+1 - the US, UK, France, China, Russia and Germany.

In July 2015, Iran had almost 20,000 centrifuges. Under the JCPOA, it was limited to installing no more than 5,060 of the oldest and least efficient centrifuges at Natanz until 2026 - 10 years after the deal's "implementation day" in January 2016.

Iran's uranium stockpile was reduced by 98% to 300kg (660lbs), a figure that must not be exceeded until 2031. It must also keep the stockpile's level of enrichment at 3.67%.

By January 2016, Iran had drastically reduced the number of centrifuges installed at Natanz and Fordo, and shipped tonnes of low-enriched uranium to Russia.

In addition, research and development must take place only at Natanz and be limited until 2024.

No enrichment will be permitted at Fordo until 2031, and the underground facility will be converted into a nuclear, physics and technology centre. The 1,044 centrifuges at the site will produce radioisotopes for use in medicine, agriculture, industry and science.

Before July 2015, Iran had a large stockpile of enriched uranium and almost 20,000 centrifuges, enough to create eight to 10 bombs, according to the Obama administration.

US experts estimated then that if Iran had decided to rush to make a bomb, it would take two to three months until it had enough 90%-enriched uranium to build a nuclear weapon - the so-called "break-out time".

The Obama administration said the JCPOA would remove the key elements Iran would need to create a bomb and increase its break-out time to one year or more.

Iran also agreed not to engage in activities, including research and development, which could contribute to the development of a nuclear bomb.

In December 2015, the IAEA's board of governors voted to end its decade-long investigation into the possible military dimensions of Iran's nuclear programme.

Sanctions previously imposed by the UN, US and EU in an attempt to force Iran to halt uranium enrichment crippled its economy, costing the country more than \$160bn (£118bn) in oil revenue from 2012 to 2016 alone.

Under the deal, Iran gained access to more than \$100bn in assets frozen overseas, and was able to resume selling oil on international markets and using the global financial system for trade.

However, in May 2018, US President Donald Trump abandoned the landmark deal and in November that year, he reinstated sanctions targeting both Iran and states that trade with it.

In May 2019 Iran suspended commitments under the agreement and gave the other signatories a 60-day deadline to protect it from US sanctions, otherwise, it said it would resume production of highly enriched uranium.

## **ISRAEL**

Israel is one of three significant countries which have never been part of the NPT. Unlike India and Pakistan, Israel has no civil nuclear power program. However, in 1975 it concluded a limited safeguards agreement with the IAEA.

After Israel was established in 1948, there was a close collaboration between France and Israel in nuclear research. Israeli scientists were involved with early French facilities near Marcoule.

In 1952 the Israel Atomic Energy Commission was established, and in 1955 the USA agreed to supply a 5 MWt pool-type reactor for Nahal Soreq, south of Tel Aviv. This IRR-1 required high-enriched uranium supplied from the USA. It started up in 1960 and from the outset was required to be under IAEA safeguards.

In 1957 an agreement was signed with France to build a large (24 MW thermal) heavy water research reactor at Dimona in the Negev desert. This would run on natural uranium and incidentally be suitable for producing weapons-grade plutonium. France apparently supplied four tonnes of heavy water for the reactor and also assisted in the construction of a reprocessing plant at the site.

In 1960 France reportedly urged Israel to put Dimona under full international safeguards, but this was not done. Due to US pressure, cursory twice-yearly inspections were carried out of the reactor only. The reactor started up in 1964, and with the benefit of oversize cooling circuits, power was subsequently raised to 70 MWt. A full suite of infrastructure is reportedly at the Dimona site, including fuel fabrication. Uranium for the reactor was initially sourced from indigenous deposits, but most is believed to have come from South Africa, over some 20 years of nuclear collaboration from 1967.

In 1968 the US Central Intelligence Agency concluded that Israel had started producing nuclear weapons from separated plutonium. In 1974 it appeared to have 20 nuclear bombs, and by the late 1990s, the estimate had grown to 75-130 nuclear warheads. No tests have been undertaken in Israel, but it is widely believed that Israel collaborated with South Africa in a 1979 test off the east coast there.

Israel has never confirmed or denied that it has nuclear weapons.

Using conventional weapons, an Israeli Air Force strike in 1981 destroyed Iraq's Osirak nuclear research reactor near Baghdad.

## **SYRIA**

From about 2001 to 2007 Syria constructed a graphite-moderated gas-cooled nuclear reactor at Dair Alzour, a remote site on the Euphrates River, near Al Kibar. It was very similar to the plutonium production reactor at Yongbyon in North Korea, using natural uranium and graphite moderator. It was about 25 MWt and next to the reactor cavity had vaults for heat exchangers and spent fuel pond, but no turbine generator. The uranium came from indigenous phosphate deposits as a by-product of treatment at Homs (Syria produces over 3.5 Mt/yr of rock phosphate which could yield 100-200 tU/yr). Before fuel



was loaded it was damaged beyond repair by an Israeli airstrike in September 2007 and the remains were demolished and buried soon after. The entire enterprise, apparently aimed at the production of weapons plutonium, was clandestine and in breach of Syria's obligations under the NPT. The evidence also pointed to North Korean involvement in supplying nuclear equipment. Syria claims that the building was a military non-nuclear installation, but has declined to discuss the matter with the IAEA in the light of evidence to the contrary or to account credibly for the presence of anthropogenic (industrially-treated) uranium found at the site by IAEA in June 2008. It has refused to allow further IAEA access to this site or to a facility near Marj as Sulṭān located in the eastern suburbs of Damascus, which was apparently connected with fuel preparation. In its November 2010 report, the IAEA said that Syria's cooperation with the Agency had diminished, access was still denied to several sites in question, and there were several serious questions and issues outstanding. The IAEA called on Syria to sign and fully implement an Additional Protocol - supposedly in force from 2006 – as well as urgently remedying its non-compliance with its existing NPT safeguards agreement, concluded in 1980. In June 2011 the IAEA board resolved to report Syria to the UN Security Council and General Assembly over non-compliance with its safeguard obligations and failing to declare the construction of a nuclear reactor.

## **LIBYA**

After several months of negotiations, Libya agreed in December 2003 to halt its development of nuclear weapons. For more than a decade it had been engaged in the development of a uranium enrichment capability, based on importing natural uranium together with centrifuge and conversion equipment, and the construction of now-dismantled pilot-scale centrifuge facilities. Some of these activities should have been reported to the IAEA under Libya's 1980 Safeguards Agreement with the UN body but were not. Evidently, Libya's nuclear enrichment program was at an early stage and no industrial-scale facility had been built, nor any enriched uranium produced. Pakistan, which is not a party to the Nuclear Non-Proliferation Treaty, was the source of the illicit technology from the late 1990s. In its September 2011 report on North Korea, the IAEA notes that uranium hexafluoride found in a cylinder shipped to Libya by the Khan network in 2001 “very likely” originated in DPRK. Libya has a Russian 10 MW research reactor using 80% enriched fuel, which has been under IAEA safeguards. It has no nuclear power program. It asked the IAEA to verify publicly that all of its nuclear activities will henceforth be under safeguards and exclusively for peaceful purposes. In that regard, Libya agreed to take the necessary steps to conclude an Additional Protocol to its NPT Safeguards Agreement, and this came into force in 2006. This will provide the IAEA with broader inspection rights, and will require full transparency and active co-operation. The first IAEA inspections of previously-undeclared facilities were at the end of December 2003.

## **IRAQ**

The main thrust of Iraq's uranium enrichment program to 1991 was the development of technology for electromagnetic isotope separation (EMIS) of indigenous uranium. This uses the same principles as a mass spectrometer (albeit on a much larger scale). Ions of uranium-238 and uranium-235 are separated because they describe arcs of different radii when they move through a magnetic field. This process was used in the Manhattan Project to make the highly enriched uranium used in the Hiroshima bomb but was abandoned soon afterwards. The Iraqis did the basic research work at their nuclear research establishment at Tuwaitha, near Baghdad, and were building two full-scale facilities at Tarmiya and Ash Sharqat, north

of Baghdad. However, when the war broke out in 1990, only a few separators had been installed at Tarmiya and none at Ash Sharqat. They had accumulated some 550 tonnes of uranium oxide concentrate which was finally removed from Tuwaitha in 2008 and sold to Cameco. At least half of this originated in Niger about 1981. The Iraqis were also very interested in centrifuge enrichment and had been able to acquire some components including some carbon-fibre rotors, which they were at an early stage of testing. In 1990 Iraq was clearly in violation of its NPT and safeguards obligations, and the IAEA Board of Governors ruled to that effect. The UN Security Council then ordered the IAEA to remove, destroy or render harmless Iraq's nuclear weapons capability. This was done by mid-1998, but Iraq then ceased all cooperation with the UN, so the IAEA withdrew from this work. In 1981 Iraq's 40 MWt Osirak nuclear reactor was destroyed by an Israeli airstrike just before fuel was first loaded into it. It was a French light-water materials test reactor using high-enriched uranium fuel, and Israel alleged that its purpose or at least potential was military. Iraq joined the NPT in 1969, and its safeguards agreement with the IAEA was concluded in 1972.

May the Force be with you