United Nations
Security Council

*Topic Area: “The status of Iran’s nuclear program”*
TABLE OF CONTENTS

1. Welcoming Letter .......................................................................................................................... 4

2. Mandate of the Committee .......................................................................................................... 5

3. Introduction to the topic .............................................................................................................. 6

4. Definitions of Key Terms .......................................................................................................... 8

5. Historical Background .............................................................................................................. 9

6. Legal Framework ...................................................................................................................... 14
         6.1.1. Sanctions Committee ............................................................................................... 16
   6.2. United Nations General Assembly .................................................................................. 16
   6.3 Non-proliferation Treaty .................................................................................................... 17
   6.4 The Advisory Opinion of the International Court of Justice .......................................... 18
   6.5 The Treaty on the Prohibition of Nuclear Weapons (TPNW) ........................................... 19
   6.6 Other actors of the international community .................................................................. 19
         6.6.1 Sanctions imposed by States and Organizations ....................................................... 19
         6.6.2. The Joint Comprehensive Plan of Action ................................................................. 21
   6.7 International Atomic Energy Agency .................................................................................. 22
   6.8 Organization for Security and Cooperation in Europe (OSCE) ........................................ 25
   6.9 European External Action Service (EEAS) ........................................................................ 26

7. Iran’s nuclear facilities and position regarding its nuclear program ........................................ 27
   7.1 The reason why Iran has a nuclear program ....................................................................... 27
   7.2. Bushehr Nuclear Power Plant ......................................................................................... 28
7.3. Nuclear facilities
7.4. Reactors
8. Possible military dimensions
9. Joint Comprehensive Plan of Action
9.1. Description of the JCPOA
9.2. Application of/ Compliance with the JCPOA
9.3. Compliance of Iran
9.4 Monitoring
10. Recent Developments
11. Conclusion
12. Points to be addressed
13. Bibliography
1. Welcoming Letter

Dear delegates,

It is with utmost pleasure and honor that we officially welcome you all to the Security Council of ThessISMUN2019. As we refer to one of the most demanding committees simulated in the conference, we also refer to one of the most challenging and topical issues: The status of Iran’s nuclear program.

The study guide could be used as a compass that indicates four orientations; preparation, cooperation, persistence and punctuality. Preparation is the first and most important step for your participation. Via the study guide we provide you the fundamental background information as well as incentives (links and further bibliography) that would motivate you in conducting your personal research and expanding your knowledge in-depth always by virtue of your countries’ policies. Since each of you is a part of an Alliance in order to find a “common ground”, cooperation is the key to achieving this goal through communication and debate. All the above require dedication and persistence in order to collaborate efficiently and effectively by following the flow of our sessions, taking part in the most challenging debates and coming up with the most suitable solutions. Last but not least, you don’t have to forget that you have to align with number of deadlines and rules and no game could be played without rules.

In addition, please be reminded that crisis is an integral part of the process. Based on a Chinese myth that attributes the crisis as an opportunity, you have to grab the opportunity to show off your talent and your skills concerning negotiation, collaboration and debating.

During your whole experience, we will be at your disposal for any possible remarks and inquiries that may arise. We are more than willing to transmit our passion, our knowledge and inspire you for your next steps. If this experience is a game of strategy, cooperation and preparation, we are ready to give you the necessary instructions. Get ready, the game is about to begin.

Best regards,

Mpourtzis Georgios
Giannakidou Georgia
2. Mandate of the Committee

The Security Council being one of the six main bodies of the United Nations, according to the UN Charter, bears the primary responsibility for the maintenance of international peace and security. Whenever the latter are under threat, the UN Security Council is entitled to meet and discuss upon the matter arisen. The UN Security Council holds a variety of measures and initiatives that reside under its discretion to activate in order to deliver its pivotal role regarding the maintenance of international peace and security.\footnote{United Nations Security Council. About the Council. [Online]. [Accessed 1 December 2018]. Available from: http://www.un.org/en/sc/} More specifically, in case that peace and security is at stake, the Council can decide upon the existence of a threat to peace and ways to resolve the emerged problem and call upon the parties involved to keep a specific stance. Among others, the Council can propose the signing of agreements and provide guidelines and principles for its conclusion, entertain mediation process between the parties, launch specific missions and envoys, as well as to ask the Secretary General for its good offices aiming to a peaceful settlement of the crisis. In cases of aggravation, the UN Security Council has the authority to ask for ceasefire and deploy military observers or peacekeeping forces. Furthermore, the authority of the Council also encompasses the adoption of measures, such as economic sanctions, embargoes, rupture of diplomatic relations, blockades and, of course, collective military action under the prerequisites set by the UN Charter.

Being the only UN body with binding force regarding the implementation of its decisions, meaning that everyone is obliged to respect and uphold them, the UN Security Council plays the leading role in preserving international peace and security.\footnote{United Nations Security Council. About the Council. [Online]. [Accessed 1 December 2018]. Available from: http://www.un.org/en/sc/about/}

As far as its composition is concerned, it consists of 15 members, 5 of them have a permanent seat (United States of America, Russian Federation, China, United...
Kingdom, France aka as P-5), whilst the other 10 seats are consisted by non-permanent members, under a rotating system which also sets as criterion the contribution of a state in international peace and security. The P-5 members of the UN Security Council have veto power, meaning that, if present, any substantial decision to be taken can be blocked if any of the 5 permanent members disagrees and exercises their veto power.

Besides, other member states of the UN may participate in the meetings of the Council, without a vote, in case the Council considers that the interests of that country are affected and its presence is subject to the prior authorization of the UN Security Council members.

3. Introduction to the Topic

The Nuclear Program of Iran was first launched in 1957. Although, Iran has never been found to possess nuclear weapons and has officially repudiated them by signing relevant treaties its nuclear program that includes facilities and its productive capabilities is faced as a potential threat to international security. Therefore, economic sanctions were imposed to Iran from State Actors and the International Organizations such as the UN, in order to force the country to limit its nuclear activity and allow its inspection by international bodies, in return for the abrogation of the aforementioned economic sanctions. As a successor of those measures, in 2015, the Iran Nuclear Deal Plan of Action (JCPOA), arose; an international nuclear deal between Iran, the United States of America, the United Kingdom, Germany, France, China, and the Russian Federation. The agreement was met with global acclaim that proved that this is a "best scenario" agreement which peacefully restrains any nuclear capacity of Iran. Thus, the deal effectively lifted sanctions and economic isolation which had been

---


previously imposed throughout the past decade on Iran.\textsuperscript{6} The deal sets a 15-years plan for a serious reduction in Iran's uranium stockpile and for the transformation of its underground facilities for research centers and nuclear technology, while also deciding to change its reactors and allow inspectors to control every action that is being developed and considered as suspicious. In 2016 the IAEA indicated that Iran had completed the necessary steps in the agreement to ensure that its program was to remain peaceful in the future.\textsuperscript{7}

In May 2018, US President Donald Trump officially announced the US withdrawal from the deal.\textsuperscript{8} He co-orchestrated a plan to restore all sanctions to strategic sectors of the Iranian economy - including the vital oil and financial sectors - which were suspended. The plan also includes the return of several individuals and entities to the "Specially Designated Nationals and Blocked Persons List".\textsuperscript{9}

At the same time, the JCPOA banned the other members of the agreement from denying a veto.\textsuperscript{10} Typically, and practically, the deal was cancelled and there is a future probability of developing a nuclear threat, while destabilizing the region and triggering a new crisis.

During this study guide we will develop in depth aspects of the subject with the sole purpose of getting familiarized with the current “Status of Iran’s Nuclear Program”.

4. Definitions of Key Terms

i. **Nuclear weapon:** A nuclear weapon is an explosive device which uses nuclear reactions of either fission or fusion to unleash its power. Its function of splitting atoms leads to release a thousand times more energy than conventional explosive devices. The process followed to develop such a weapon is of great interest.\(^\text{11}\)

ii. **Uranium enrichment:** Uranium is a chemical element which is a critical component for nuclear energy. The main uranium isotope in nature is \(^{238}\text{U}\) in a percentage of 99.3% while another isotope, \(^{235}\text{U}\) (almost 0.7% in nature) is useful for nuclear technology. Thus, to increase its amount, \(^{238}\text{U}\) needs to undergo enrichment. Uranium can take two forms, either low enriched (LEU) or high enriched (HEU).\(^\text{12}\)

iii. **Ballistic missile:** Ballistic missile is a rocket-propelled self-guided strategic-weapon system that follows a ballistic trajectory to deliver a payload from its launch site to a predetermined target. Ballistic missiles can carry conventional high explosives as well as chemical, biological, or nuclear munitions.\(^\text{13}\)

iv. **Non-proliferation:** The prevention of an increase or spread of something, especially the number of countries possessing nuclear weapons. The Treaty on the Non-Proliferation of Nuclear Weapons, commonly known as the Non-Proliferation Treaty or NPT.\(^\text{14}\)

v. **Dual use goods:** Dual-use items are goods, software and technology that can be used for both civilian and military applications. An indicative list of dual use goods could be as followed: 0- Nuclear, 1- Materials, Chemicals, Microorganisms and Toxins, 2- Materials processing, 3- Electronics, 4- Computers, 5- Telecommunications and Information Security, 6- Lasers.
and Sensors, Navigation and Avionics, Marine, Propulsion Systems, Space Vehicles and Related Equipment.\(^{15}\)

**vi. Nuclear Weapon 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\(^{16}\)

An important part of NPT and nuclear governance is the creation of Nuclear Weapon Free Zones. Within these areas, the "full nuclear non-proliferation regime" applies and "an international verification and control system is in place"\(^{17}\). Several NWFZs were created and ratified with a treaty and with the consent of the nuclear-weapon states that agreed not to develop nuclear weapons facilities in the zones. Existing NWFZs are: Latin America and the Caribbean according with the Tlateloco Treaty, the South Pacific according with the Rarotonga Treaty, the Bangkok Treaty establishes the Southeast Asian free zone and, finally, the Pelindaba Treaty entrench Africa, Central Asia and Mongolia as free nuclear weapon areas.

**5. Historical Background**

Since the 1960s, a series of events have contributed to the development of a nuclear non-proliferation regime. Starting from the address of President Eisenhower to the UN General Assembly, who called for the creation of an international atomic energy organization under the aegis of the United Nations, who could control the production and dissemination of fissile material to serve only the peaceful pursuits of mankind, such as for scientific and energy purposes. Following the “Atoms for Peace speech”, several UN member states proceeded to the establishment of the International Atomic Energy Agency (IAEA) in 1957 to ensure "the contribution of atomic energy to peace,

---


health and well-being across the world\textsuperscript{18}. The Agency operates through bilateral and multilateral security agreements between the IAEA and states wishing to develop nuclear programs.

More specifically, the Iranian nuclear program is related to the Iranian great-idealization of the twentieth century of the Pahlevi dynasty, and its later will for regional geopolitical hegemony. It began with the assumption of power in 1953 by Shah Mohammad Reza Pahlavi as a US-supported research fellow.\textsuperscript{19}

In \textbf{1957} a co-operation agreement was signed with the United States for the production of nuclear energy\textsuperscript{20}

Ten years later in \textbf{1967}, following the fundamental principles of the Agreement\textsuperscript{21}, The Tehran Nuclear Research Center (TNRC) was founded under the auspices of the Atomic Energy Agency of Iran (AEOI). The TNRC was equipped with a 5-megawatt US reactor powered by enriched uranium.\textsuperscript{22}

In \textbf{1968}, Iran signed the NP agreement, which it ratified in 1970. Iran's nuclear program is subject to the control of the IAEA commitments,\textsuperscript{23} and finally in \textbf{1970}, Iran ratified the Treaty on the Non-Proliferation of Nuclear Weapons. According to official records, the country had 5,545 kilos of enriched uranium and 112 kilograms of plutonium for research purposes.

In 1974, with the contribution of the United States, Iran finalized its plans to build up 23 nuclear power plants by the end of 2000. Thus, Shah commissioned French and German companies to build nuclear reactors, such as Bushehr, that would power inside the city of Shiraz. In 1976, US President, Gerald Ford, signed a directive on the purchase by Iran of a US reprocessing plant for the extraction of plutonium from the nuclear reactor fuel.24

In 1979 the Iranian Revolution began. We are talking about the fall of the Iranian monarchy and the Pahlavi dynasty (1925-79), which resulted in the establishment of Islamic democracy. The Western trends of the Shah program, in comparison with the unbridled corruption and the existence of the tough secret police that controlled everything, were the most important reasons why the Iranian people rise up against the regime. Thus, the US suspended the contracts with Iran.25

At the end of 1990, Iran decided to re-launch its nuclear program in cooperation with Russia, Pakistan and North Korea, but at the same time stated its commitment to the obligations under the Nuclear Non-Proliferation Treaty in order to narrow western concerns.26

Following the 2002 disclosure by Iranian exiles of a secret nuclear program. The disclosure coincided with U.S. concern about the spread of weapons of mass destruction to rogue regimes and extremist networks. Iran, in order to avoid the imposition of international sanctions, decided to suspend the enriched uranium process on 21 October 2003 by inspecting inspectors from the IAEA, while starting negotiations with France and Germany.27

In November 2004, France, Germany, the UK and Iran reaffirmed the text of the provisions of 21 October 2003, while negotiating an agreement on the peaceful purpose of its nuclear programs.

In 2006, Iran announced the resumption of the enriched uranium process in Natanz and the suspension of negotiations. 28 Especially, in December 2006, the United Nations Security Council mandated all member states to “to prevent the supply, sale or transfer... of all items, materials, equipment, goods and technology which could contribute to Iran's enrichment-related, reprocessing or heavy water-related activities or to the development of nuclear weapon delivery systems”. 29

Following Iran's announcement on 19 July 2011 of the development of a new enriched uranium plant and its intention to create a new uranium enrichment center in Qom, the UN has enacted even stricter fourth round of sanctions, including a ban on Iranian investment in nuclear-sensitive areas, a ban on the sale to Iran of major arms systems, a ban on ballistic missile technology connected to nuclear weapons and finely further tighter restrictions on Iranian international finance and restrictions on travel and assets for Iranian organisations. 30

Iran's first nuclear power plant, the Bashehr reactor, was inaugurated on September 12, 2011. Iran also announced the creation of a new nuclear power plant at Darkhovin, while pursuing the creation of more medium-sized nuclear and uranium mines. 31

In November 2013 in Geneva, an agreement was reached between the six major powers (US, France, Britain, Russia, China, Germany) and Iran, aimed at temporarily

suspending the Iranian nuclear program for six months, in exchange for relief by 7 billion dollars on the sanctions imposed by the West. The agreement also does not provide for any recognition of an Iranian right to enrich uranium, while Iran is bound by the obligations arising from the IAEA.

On 14 July 2015, an agreement was signed in Geneva, now called the JCPOA (Joint Comprehensive Plan of Action), between the six major powers (USA, China, Russia, France, UK, Germany) and Iran, which entered into force on 16 January 2016, providing international control of the Iranian nuclear program, in return for the gradual lifting of international sanctions against it.

In May 2018, US President Donald Trump announced the withdrawal of the United States from the international agreement of 2015 and the re-imposition of sanctions on Iran, causing international reactions. According to the International Atomic Energy Agency, the US intelligence services and the UN Security Council, Iran has fully complied with its obligations. But the violation of the Iranian nuclear treaty is more dangerous. Iran may remain in the agreement if the other signatories can provide adequate commercial and investment benefits. However, this is not certain and probably not viable because of the US's ability to impose painful sanctions against foreign firms that deal with Iran. UN Secretary-General Antonio Guterres as well as EU High Representative Federico Mogherini have called on the other partners of the international agreement on Iran's nuclear program (JCPOA) and the international community to meet their commitments.

---

On November 5 2018, the US announced a series of new sanctions against Iran, aiming to curb Iran’s missile and nuclear program, and to reduce its destabilizing role in the Middle East by supporting forces in Yemen, Syria and Libya. Switzerland has announced talks with the US and Iran on the creation of a humanitarian food and drug payment channel.\(^{37}\)

6. Legal Framework


i. United Nations Security Council Resolution 1540

The Resolution 1540 refers to the non-proliferation of weapons of mass destruction in general, which includes nuclear weapons, and was unanimously adopted in 2004 under Chapter VII of the UN Charter. It calls upon all Member States:

- to refrain from supporting non-State actors that operate in the development, manufactory and transportation of such weapons and
- to take the appropriate legal action so as to prohibit such operations.\(^{39}\)

ii. United Nations Security Council Resolution 1737

The Resolution 1737 was unanimously adopted on December 2006. The members of the Security Council, acting under Art. 41 of Chapter VII of the UN Charter and fully concerned about Iran’s failure to comply with the full and sustained suspension of all enrichment-related and reprocessing activities, decided, amongst others, to:


- ban trade with Iran related to certain nuclear proliferation-sensitive items;
- impose an asset freeze on a list of persons and entities involved in proliferation-sensitive activities;
- establish a Sanctions Committee;
- call for selective economic sanctions against Iran.\textsuperscript{40}

iii. United Nations Security Council Resolution 1747

- On March 2007, due to Iran’s reluctance to suspend its uranium enrichment program, the Security Council, unanimously adopted on March 2007 the Resolution 1747, acting under art. 41 of the UN Charter. According to it:
  - a ban on Iran's arms exports was imposed and
  - more people and entities were added to the list of those involved in proliferation-sensitive activities.\textsuperscript{41}


Acting in accordance with Art. 41 of the 7th Chapter of the UN Charter, the Security Council decided to tighten the sanctions, imposing new, more effective measures. Some of them included:

- The prohibition of Iran to participate in any activities related to ballistic missiles;
- travel bans on individuals participating in Iran’s nuclear program;
- a freeze of the assets of the Iranian Revolutionary Guard and Islamic Republic of Iran Shipping Lines;
- The establishment of a new regime towards the inspection of suspicious cargo;
- a call to all States so as for them to prohibit new banking relationships with Iran and


● the establishment of a UN panel of experts, competent for assisting and monitoring states' implementation of the sanctions.  

v. United Nations Security Resolution 2231

On 20th July 2015, just after the signing of the JCPOA, the Resolution 2231 of the Security Council, decided in accordance with art.41 of the 7th Chapter of the Charter of the UN, signaled the change of attitude towards Iran, as:

● endorsed the JCPOA;
● called upon Iran not to undertake any activity related to ballistic missiles, designed to be capable of delivering nuclear weapons, including launches, using ballistic missile technology and
● prepared to gradual uplift of the economic sanctions against Iran that had been imposed by previous UNSC Resolutions, which shall be terminated.

6.1.1. Sanctions Committee

The Sanctions Committee created under the UNSC Resolution 1737 has published annual reports on the topic of the implementation of the sanctions. More specifically, they include the relevant information delivered by IAEA, the Panel of Experts and Member States on the actions towards the implementation of the sanctions regime, as well as the violations of it by Iran or other States.

6.2. United Nations General Assembly

References to nuclear weapons are deliberately omitted from the United Nations Charter and their use is not acceptable even in the light of the individual threat.

---


However, one of the objectives of the UN is disarmament, which is mentioned in several points of the Charter, Article 11 and Article 26. The provisions of Article 11 led to the creation of the First Committee. "With governments increasingly engaged in nuclear escalation, over the years”, this committee has issued decisions on nuclear disarmament, which have led to the drafting of the of the basic treaties dealing with nuclear control such as: the Statute of the International Atomic Energy Agency and the Nuclear Non-Proliferation Treaty.  

6.3 Non-proliferation Treaty

In 1962, when the US and the USSR threatened the use of nuclear ballistic missiles in the so-called "Cuba Missile Crisis", the world was in danger of a possible nuclear conflict. For this reason, UN member states drafted the 1963 Treaty on Prohibition testing of nuclear weapons in the atmosphere, outdoors and under water, and in 1968 adopted what is now considered the cornerstone of the modern nuclear regime: NPT. The NPT is an international treaty, which entered into force in 1970, with the objective to prevent the spread of nuclear weapons and their respective technology, to promote cooperation in the use of nuclear energy for peaceful and scientific purposes as well as to further the aim of achieving nuclear disarmament. It is based on previous rules: the doctrine of disarmament such as the Geneva Conventions, the Hague Protocol and the Antarctic Treaty, the United Nations Charter and the IAEA Statute, with its stated objective of "achieving as soon as possible the cessation of the nuclear arms race and taking measures in the direction of nuclear disarmament". The NPT identifies five "states that created and exploded a nuclear weapon device before January 1st, 1967: the US, the Soviet Union, the United Kingdom, France, the China, parties right to maintain nuclear capability, prohibits at the same time all other parties to develop nuclear weapons but as an international treaty, NPT has the primary responsibility to apply only to the states that have signed and ratified it. The Treaty represents the only binding commitment in a multilateral treaty, so far, to the goal of disarmament by the nuclear-weapon States. A total of 191 States have joined the
Treaty, including the five nuclear-weapon States. There are, however, some states have never signed NPT. In accordance with their obligations under the Charter of the United Nations, those non-NPT States should claim to use atomic energy only for peaceful purposes and for national defense. Despite this weakness, the current nuclear control regime has been formed under the NPT.

6.4 The Advisory Opinion of the International Court of Justice

By the resolution 49/75 K adopted on 15 December 1994, the UN General Assembly requested an advisory opinion of the International Court of Justice on the question “Is the threat or use of nuclear weapons in any circumstance permitted under international law?”. The Court, after examining all the sources of the international law, found out that the law of the use of force, as described in the United Nations Charter, and the law of armed conflicts, as known as international humanitarian law, alongside with any specific treaties on nuclear weapons could be applicable. Therefore, it observed that “the principle of proportionality might not in itself exclude the use of nuclear weapons in self-defense in all circumstances”. On the other hand, any use of force must meet the requirements of the law of armed conflicts. Concerning the law of armed conflicts, it concluded that “the use of nuclear weapons could not be seen as specifically prohibited on the basis of that law”, since there is neither an international treaty nor an international customary rule prohibiting the use of nuclear weapons comprehensively. Concerning the international humanitarian law per se, the Court emphasized on the distinction between combatants and non-combatants and on the prohibition of the unnecessary suffering to the combatants. Finally, it pointed out that the “States do not have unlimited freedom of choice in the weapons they use” and “the use of such weapons seemed scarcely reconcilable with respect for the requirements of the law applicable in armed conflict” and called the


international community to continue negotiating towards a “nuclear disarmament in all its aspects”.\(^{48}\)

### 6.5 The Treaty on the Prohibition of Nuclear Weapons (TPNW)

The UN TPNW, signed in July 2017, is the first legally binding international agreement which aims to comprehensively prohibit the development, testing, production, acquisition, possession, stockpile, use or threat of use nuclear weapons.\(^{49}\) The Treaty will come into effect when at least 50 states ratify or accede to it. At the moment, there are 70 signatories and 21 states parties.\(^{50}\)

### 6.6 Other actors of the international community

#### 6.6.1 Sanctions imposed by States and Organizations

The international community, and by extension the United Nations, saw the Iranian program as a path leading to the development of nuclear warheads that could easily spread gradually to the Middle East and then to Europe. Taking into account the development of nuclear weapons in Iran, many countries, such as the US, China, Australia, Canada, South Africa, Korea, Israel, Japan and EU Member states, as well as international bodies, decided to impose sanctions against Iran, with a view to ensure that Iran’s nuclear activity is in accordance with the NPT and to prevent any malicious actions.\(^{51}\)

---


The roots of sanctions imposed against Tehran range from the early 1950s when the United Kingdom and the United States declared a boycott of Iranian oil following the nationalization of the Anglo-Iranian Petroleum Company by the Iranian government. At that time, the nationalization of the western companies was quite common, and the practice of imposing sanctions against expropriators widely applied in the Middle East region. However, in the case of Iran, Washington and London decided to use their political, economic and military forces immediately. During the Ajax operation, Iran's democratically elected prime minister was overthrown by US and British specialists. The new government quickly restored the status quo and made an international joint venture with the United States and the United Kingdom to receive basic shares of the country's wealth and export sources.

The next episode of sanctions against Iran came in 1979 when US diplomats were taken hostage during the Iranian Revolution. In response, US President Jimmy Carter froze all Iranian assets in the United States, and in April 1980, he introduced a large-scale trade embargo. Executive Order 12282 and executive order 12211 banned the import and export of goods to and from Iran with the exception of humanitarian aid. Credits or loans have been forbidden and imports from Iran were being blocked. The oil sector suffered more from banning imports, with production dropping to almost zero after the imposition of sanctions, compared to around

---


500,000 barrels per day, which was in force prior to the Iranian Revolution.\textsuperscript{57} The USA also tried to secure the release of their hostages. However, the result of this metric only led to the strengthening of Tehran's negotiating positions.\textsuperscript{58}

Some years later, in 1995 the US banned the firms investing in the energy sector, followed by a general ban on the exports of all goods and services from the United States to Iran or from Iran to the United States, 1996.\textsuperscript{59} Moving on to 00’s, the United States, after the sanctions imposed by the UN Security Council, banned Bank Melli, Bank Mellat and Bank and Bank Saderat, due to their connection with nuclear activities. In 2009, the US imposed sanctions to Bank Mellat in Malaysia as well. A year later, the US imposed sanctions to petrochemical companies supplying petroleum products to Iran, banks involved with Revolutionary Guards and the Post Bank of Iran. Later this year, the Republic of Korea and Japan slapped additional sanctions to Iran.\textsuperscript{60} In 2011, the US announced new unilateral sanctions against Iran. In November 2011, due to a report supporting that Iran is working on creating an atomic bomb, the Western States stepped up their sanctions. The EU has also managed to reach to a preliminary agreement about sanctions against Iran, and more specifically about a ban to imports of Iranian oil, in January 2012.\textsuperscript{61}

\subsection*{6.6.2. The Joint Comprehensive Plan of Action}

At the same, the negotiations in progress between "P5 + 1", the European Union and Iran concluded to a set of "parameters for a common integrated plan of action for the
Iranian Islamic Republic nuclear program" adopted on 2 April 2015 (US Department of State) and a final agreement of 14 July. According to the final agreement, namely the Joint Comprehensive Plan of Action (JCPOA), Iran agreed to take steps to curb its nuclear program in return for a significant easing of the sanctions already imposed by the US, UN, and EU. This was chosen by an international community to turn a quasi-dangerous enemy into a possible ally - believing that this agreement could trigger talks on nuclear disarmament of Israel. However, as already mentioned, the US, under the Donald J. Trump presidency, reissued the waivers in 2018, so as to “fix the flaws” of the JCPOA.  

6.7 International Atomic Energy Agency

The IAEA (The International Atomic Energy Agency) is the world's central intergovernmental forum for scientific and technical co-operation in the nuclear field. It was created in 1957 due to deep fears and expectations generated by the discoveries and possible dangerous uses of nuclear technology. 

Iran has to declare to the IAEA an analytical inventory of the quantities and positions of all nuclear materials in the country and nuclear-related activities, and to inform each new facility as soon as the country decides to construct it.

There is also the Additional Protocol (AP) of the JCPOA obliging Iran to provide the IAEA with additional information on its nuclear program and additional access to nuclear facilities. Under the AP, Iran is called upon to provide additional information on the locations of nuclear installations and other sites normally associated with nuclear materials but also to report all exports and imports of specific equipment and materials associated with nuclear materials and fuels. In this way, IAEA’s access to


nuclear-related facilities is strengthened, thus verifying the projects declared by Iran. The IAEA has the possibility, following a brief alert, to request access and control at any location in the declared nuclear installations through a provision called 'supplementary access'. The timing of notification of the IAEA's complementary access intention is two hours if the IAEA is already in a nuclear facility conducting an inspection or information design. Otherwise, 24 prior to the visit is required.65

The JCPOA itself expressly provides that the IAEA will have the authority to inspect and monitor in order to confirm that Iran is following the obligations of the Agreement. More specifically, in facilities such as Natanz, Iran will provide the IAEA with daily access to all buildings for 15 years and will allow the IAEA to use modern technologies. Iran will also expand the number of people authorized to carry out inspections in Iran. But it will only appoint inspectors from countries that have diplomatic relations with Iran.66

There are also additional measures, such as declaration and monitoring of all of Iran’s stockpiles of uranium ore concentrate, which could be enriched. These measures will last for 25 years. Additionally, for the following 20 years, declaration and monitoring of Iran’s stockpiles of centrifuges, along with key equipment for centrifuge production such as flow-forming machines for metal centrifuges and filament-winding machines for those made of carbon fiber. Finally, for 15 years, continuous monitoring of excess centrifuges stored in Natanz Hall B.67

The JCPOA provides the IAEA with the necessary means to confirm that Iran complies with the limits and obligations of the agreement and to detect in time any nuclear material diversion, use or trade in undeclared materials. These measures

prevent Iran from making unlawful use of nuclear material in its declared facilities, but also from developing secret nuclear activities. In other words, to build nuclear weapons secretly using HEU (high enriched uranium), Iran must acquire or build a separate and secret fuel cycle - a secret source of natural uranium, a secret conversion facility for UF production and a secret enrichment plant enriched uranium, as well as secret facilities for uranium metal production and the manufacture of nuclear weapons components.68

IAEA launched the study on the nuclear program for Iran in 2002. The two parties launched in August 2007 the preliminary draft for the settlement of the issues related to the Tehran nuclear program. Most of the outstanding issues were resolved, however, the IAEA Board of Governors on 2 June 2008 announced that there is an issue "not yet resolved" and referred to the "possible military dimensions of Iran's nuclear program".69

In order to resolve these issues, Iran was provided with documents originating from organizations or governments in other countries, and reported that Iranian entities may have carried out studies on the development of nuclear weapons, nuclear warheads and conventional explosives used in nuclear weapons. Iranian officials have argued that the documents are not authentic. On the other hand, IAEA reported that documents are accurate, but it also claimed that the activities described were exclusively for non-nuclear purposes.

According to the IAEA Resolution of 8 November 2011, it is essential" Iran and the IAEA "to intensify their dialogue with a view to urgently resolving all outstanding substantive issues". In October 2013, IAEA officials and their Iranian counterparts

decided to adopt a "new approach" to resolve these issues. This new approach was JCPOA. According to the statement, Iran and the International Atomic Energy Agency have agreed to "enhance cooperation and dialogue aimed at ensuring the exclusively peaceful nature of Iran's nuclear program by resolving all outstanding issues not yet resolved by the IAEA. In 2015, the progress made by Iran has been described in the “NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran, Report by the Director General”

According to the Report, the compliance of Iran is in doubt, since it is not sure whether all nuclear material in Iran is used for peaceful activities. Thus, discussions between the Agency and Iran have to be continued.71

6.8 Organization for Security and Cooperation in Europe (OSCE)

In OSCE’s Parliamentary Assembly annual session of 2012, held in Monaco, the Organization adopted the “Resolution on Iran’s nuclear program”72. The main target of the resolution was to ensure and imprint the intention of member states to abide by the aforementioned UNSC resolutions and continue seeking for a sustainable agreement with Iran. Moreover, in article no.9 it is clearly stated that the solution of the problem shall only be attempted via diplomatic means and -consequently- at no case with military intervention. In an effort to totally comply with other international agreements, OSCE recalls the NPT and reminds that both Iran and OSCE’s member states share the same responsibility regarding the peaceful use of nuclear materials and nuclear energy. As such, calls upon every involved party to set the example, by reducing “their arsenals as part of the global effort to enhance nuclear security”. Last but not least, if we take into consideration the conceptional connection between

articles no. 8 and 11 of the respected Resolution, OSCE clearly stipulates that not only Iran but any country that does not meet the standards set by the international community and IAEA will have to face the same consequences. The latter can be interpreted as an attempt of OSCE to come across as a factor that will be able to resolve the issue in a detached manner.

6.9 European External Action Service (EEAS)

When referring to the actions of EEAS we are actually witnessing the streamlined policy of the European Union regarding the domain of foreign affairs. In order to be specific from the very beginning, there is no binding legal document as for the topic at hand, deriving from this institution. Notwithstanding, it is important to briefly present the intentions expressed by Federica Mogherini, the High Representative of EU for Foreign Affairs and Security Policy (HR).

Despite the withdrawal of the United States from the “Iran deal” on 8 May 2018, all EU member states reaffirmed their commitment to JCPOA. With EEAS being one of the main contributors during the negotiations that led to the adoption of this plan, it was more than obvious that a possible EU bail out of the deal would result in another major destabilization in Middle East. In order to clarify EU’s strategy after President Trump’s decision, HR released a declaration stating that as long as Iran follows its obligations, as far as this is verified by the IAEA reports, EU will refrain from imposing any sanctions. Although EEAS clearly shares some of the concerns that led the United States to reimpose sanctions, it adopts a totally opposite approach,

---


considering the US strategy as “not the best one” when it comes to the confrontation of the issue.\(^7\) Thus, for the time being, the only EU sanctions against Iran still in force, are those concerning human right violations and terrorism support. During her latest visit to Iran, the HR repeated that EU and its partners are undoubtedly still supporting and will keep on implementing JCPOA.\(^7\)

7. Iran’s nuclear facilities and position regarding its nuclear program

Nuclear weapons were and are an important factor in maintaining "long peace". However, there is a contradiction between a peaceful nuclear past and a terrible nuclear future due to the further proliferation of nuclear weapons. Iran seems to have started its nuclear program in 1958, starting with a research reactor purchased from the United States. The new regime, following the 1979 revolution, continued its country's nuclear program, and Iran had been very close to acquired knowledge and means of producing and using nuclear energy.\(^7\)

7.1 The reason why Iran has a nuclear program

Iran claims that the desire of having nuclear weapons is dissuasive and peaceful in nature, as it aims to preserve the political system of the country and does not aim to disperse nuclear power into allied forces in the region. In addition, we have to mention that the Iranian state is trying to be a model of a powerful Islamic country that accomplishes to turn it into a measurable military force. At this context, the country itself is trying to turn into a prominent regional power and stabilize its position in the Middle East region. We shall not forget that Iran is geographically


\(^7\) Perthes V. “Ambition and Fear: Iran’s Foreign Policy and Nuclear Program. Journal Survival. 2010
detached with four countries that have nuclear programs, weapons and know-how. Moreover, Iran, with its strategic choice to develop a nuclear program, is opposed to western selectivity in terms of nuclear power generation. The country has also pointed to the existence of older foreign regimes, which have removed people from access to basic technologies and exploited its wealthy sources. These forces had a detrimental role in the region and limited the margins of the Iranian economy. All these parameters necessitate the development of its own nuclear program. To conclude, Iran's desire to acquire nuclear weapons intensified during the Iran-Iraq war; the country seems to be convinced that Saddam Hussein would not start a war if he knew Iran had nuclear capabilities.

7.2. Bushehr Nuclear Power Plant

It is noteworthy that Siemens and its subsidiary company named Kraftwerke Union were working hard at the plant in the region from 1974 until the 1979 Islamic Revolution. As a result, construction of Unit 1 was 90% complete and 50% Unit 2. However, between 1980 and 1988, under the Iran-Iraqi war, a large part of Bushehr was bombed and destroyed. Appraisers report that if these disasters did not occur, the project would be completed within 3 years and would cost more than 2.4 billion.

In 1980, Iran approached suppliers from Germany, Spain and Argentina, that, although initially expressed interest, ultimately did not agree because of US pressure. The story was repeated in February 1990 when INI, ENSA nuclear equipment and ENUSA were on the verge of agreeing with the Iranians to supply them with the appropriate fuel for the reactor, yet the debates were wrecked again due to US mediation. Finally, in March 1990, Iran approached the Soviet Union and China and reached a protocol for the completion of Bushehr and two other VVER-40 reactors. However, there was a significant delay for technical and economic reasons. Iran approached Russia as the supplier for the first nuclear plant and then in cooperation with the Minatom Atomic Energy Ministry there was a draft agreement of 800 million to complete the reactor within four years. This ante portas agreement was canceled due to US pressure at the Russian-US summit. However, on August 24, 1995, Iran
and Russia signed a supplemental agreement, which, in additionally to the
construction of the reactor, provided supplementary funding of 30 million from the
Russian side. Countries like Italy, the Czech Republic and Poland refused to supply
two turbines to Iran for the reactor.

In 2007, a company named atomstroyexport sent its first LEU fuel shipment and its
last shipment in 2008.

In 2014, the IAEA certified that the reactor was operating at 100%. UN resolutions
have restricted Iran's supply of nuclear products, but have allowed the production of
equipment and fuel for a light water reactor such as Bushehr. In 2017, IAEA has
confirmed that there is a roadmap that meets IAEA's obligations to the agreement
between Russia and Iran. At the same time, the Iranian side is seeking to put into
operation the second reactor in the factory.

7.3. Nuclear facilities

Iran's choice to produce and dispose of nuclear weapons is an inherent option because
it could resort to import nuclear weapons and not produce it. Iran has at its disposal
three centrifuges facilities to enrich uranium, located in Natanz, Fordow centrifuge
facility, located in Qom city and numerous laboratories and various facilities involved
in nuclear design and production of centrifuge's components. In the graph below there
is an brief explanation of Natanz Dual Facilities and Fordow enrichment Facility and
what exactly each facility includes.
• Natanz Facility

**Commercial Facility**
- It has 50,000 centrifuges
- Since 2007, Iran has begun uranium enrichment
- From 2013 produces 10,357 kilograms of low-enriched uranium hexafluoride containing 5% uranium
- By 2015 it produces 15,525 kilograms of low-enriched hexafluoride
- It has 15,400 centrifuges of 1st generation, known as IR-1 and 1,000 centrifuges of greater efficiency
- According to the commitments of JCPOA 5.060 IR-1 centrifuges must be maintained and all the rest removed.
- It continues to produce enriched uranium hexafluoride but has sent most of the LEU to Russia to keep up with the permissible limits of the agreement, with the aim of having a total stock of about 300 kilograms.

**Pilot Facility**
- In 2010 at the Natanz Pilot Facility, Iran attempted to enrich up to 20% uranium-235 for use as fuel in Tehran’s Research Reactor
- The reactor was converted to LEU in 1994 with Argentine assistance in supplying in fuel.

• Fordow Enrichment Facility

**Fordow enrichment Facility**
- From 2011, Iran enrich uranium up to 20% to convert it to uranium-235 following the instructions of the IAEA
- From 2013 the country supplies uranium hexafluoride to 696 centrifuges of IR-1 and has installed an overall of 2710 centrifuges
- The plant was transformed into a nuclear, physical and technological center, according to the JCPOA forecast. Centrifuges have been reduced to 1044 and are now used to produce materials useful for medical and industrial uses, while no nuclear material is available.
• **Bonab Atomic Energy and Research Center**

A research center for atomic energy for agricultural uses, located in 80 km south of Tarib, which is not supervised by the IAEA and does not operate according to its regulations. According with surveys and studies in the area, no prohibited activities have been found. However, there are, claims that underpin the existence or construction of a nuclear reactor, with a Chinese company having undertaken the funding and assistance for its further establishment and operation.

• **Darkovin Facilities**

A double attempt was made to build a nuclear power plant by French and Chinese companies. In 1974 Framatome undertook the construction of a pressurized water reactor. Therefore, in 1979, Iran canceled the convention due to the Islamic Revolution.

An agreement was reached in 1992 with Qinshan Nuclear Energy Corporation and the Shanghai Nuclear Energy Institute to build a 300 MW reactor. The necessary seismic studies were carried out, but Iran had been focus on Bushehr project and was unable to raise the enormous amount of money required by this agreement.

• **Gorgan or Neka Facilities**

In 1992, there was a study on the construction of 2 Russian VVER-440 nuclear reactors, between the Soviet Union and Iran under the agreement of the creation of Bushehr Unit1 and Unit2. Russian technicians and scientists conducted geological studies in the area, which was judged unsuitable due to seismological instability. However, it is rumored that there is a secret, upcoming weapon related facility in the area. Similar allegations also exist in the Möllém Kaleyak region, about the existence of a fissile material factory and center.
7.4. Reactors

- **Arrak Reactor**

Iran argues that the reactor will be used for medical and other purposes. According to AEOI’s report in 2012, the reactor is being used in areas such as: medical research, industrial plant, radioisotope production of the country. The reactor is also used to conduct research in a variety of disciplines such as neutron physics, chemistry thermal hydraulics health physics, and training of experts in the heavy industry and nuclear industries, manufacturing components such as reactor vessels, heat exchangers, and pumps.

In 2013, Iran partially disrupted aspects of the construction of a reactor according to the JCPOA. This reactor raised the objections and concerns of the international community because its spent fuel contains better plutonium for nuclear weapons than other reactors such as the Bushehr reactor. Arrak reactor, if completed, could produce plutonium sufficient for up to 2 nuclear weapons per year.

However, the JCPOA agreement provided for the replacement of the Arak Reactor, and Iran indeed obeyed this mandate. It is also planned to redesign the reactor in accordance with the P5 + 1 design in order to avoid the production of plutonium for weapons. In 2016, Tehran committed itself to the realization of the plan within 5 years.

In addition, the JCPOA dictated the non-accumulation of heavy water beyond the needs of Iran, which amounts to 90 metric tons after the commissioning of the reactor. The latest IAEA report in 2018 has shown that this is not the case as Iran has 122.9 metric tons of heavy water. The latest IAEA report in 2018 showed that Iran is intruding the Agreement as it has 122.9 metric tons of heavy water.
• **Uranium Enrichment**

Enriched uranium is a form of the element with a high concentration of one isotope, U-235, that could be used to fuel a bomb. The nuclear deal prohibits Iran from possessing any uranium that’s more than 3.67 percent U-235, and prohibits it from having more than 660 pounds of enriched uranium. Iran has two uranium enrichment sites, at Natanz and Fordow. Under the deal Iran is allowed to continue enrichment at Natanz but with a series of constraints. It turns Fordow into a research center where centrifuges are used for purposes other than enrichment and particularly for producing stable isotopes. The JCPOA limits the number of centrifuges installed in Iran to roughly 6,000 from around 20,000 before the agreement. Caps at 3.67% the purity to which Iran can enrich uranium — far below the roughly 90% boundary of weapons-grade. Before the deal, Iran enriched uranium to up to 20%. Prohibits enrichment and nuclear materials from Fordow. Only allows Iran to enrich uranium

---


with its first-generation IR-1 centrifuges. Finally, let Iran carry out research with small numbers of more advanced centrifuges as we have previously mentioned, but without accumulating enriched uranium.\textsuperscript{82}

The effect of these terms is to increase Iran's "breakout time" to obtain enough nuclear material for a weapon to one year, up from less than 90 days before the JCPOA. Iran also started to implement the Additional Protocol to its IAEA safeguards agreement, which together with other measures under the JCPOA will increase the agency's ability to monitor nuclear activities in Iran and verify that they are peaceful.\textsuperscript{83}

- **Plutonium Enrichment**

  Iran had a heavy-water reactor at Arak that could eventually have produced spent fuel from which plutonium could be separated. Under the JCPOA, this reactor now is inoperable: The core of that reactor has been removed and filled with concrete to make it unusable. Moreover, the reactor was redesigned so as to minimize the production of plutonium and not to produce weapon-grade plutonium. Furthermore, all spent fuel already produced in Arak were and are shipped out of Iran.\textsuperscript{84}

8. Possible military dimensions

Conceptually, as long as Iran has no operational nuclear warheads, ballistic BW missiles are the highest Iranian destructive force. These biological heads are armed for long-range missile firing. Since 1985, using Soviet technology, Iran has been working on a 2500-kilometer, called Shahab-5 or BM-5. At the same time, there is unconfirmed information that it had developed mid-range missiles of 4.500–5.000


kilometers. The limited accuracy of the Iranian ballistic missiles rendered them capable of delivering weapons of mass destruction.\textsuperscript{85}

Since 2002, the Organization has been increasingly concerned about the possible existence of vague nuclear activities in Iran involving military organizations, including those related to the development of nuclear-powered missiles.

In November 2011 the report also warned: "There are also indications that some activities related to the development of nuclear explosive devices have continued since 2003 and that some may continue to be in progress."

Iran's nuclear program identified by the IAEA consists of: a program management structure under the supervision of the Iranian army, unsubscribed procurement activities, undeclared nuclear materials, work on nuclear components for an explosive device, developing a detonator, launch of high explosive and related experiments, hydrodynamic experiments (fissionable nuclear weapon design tests), modeling and calculations for high-enriched uranium explosive compaction, manufacture of neutron primers, technical studies to incorporate a global payload into a rocket delivery vehicle and studies on a merger, firing and arming system.

However in 2013, the Co-operation Framework with JCPOA, has never been fully implemented by Iran. Iran has made a series of commitments, such as providing explanations on outstanding issues, technical expert meetings, technical measures and discussions, as well as separate regulation on the issue of Parchin "(Military Research and Development Complex and Field of Testing).

In addition, the JCPOA includes several provisions aimed at limiting Iran's activities in relation to research and development of nuclear weapons. For 15 years, Iran will not produce, prospect, or acquire a highly enriched plutonium or uranium and will not produce or acquire any plutonium or uranium metal. The only exception, which has to be adopted by the Joint Committee, will allow Iran to research on uranium metal fuel

\textsuperscript{85}Fitzpatrick M. \textit{The Iranian Nuclear Crisis: Avoiding Worst-Case Outcomes}. 2008. Routledge, Oxon
for the Tehran research reactor. On a permanent basis, Iran will not participate in the following activities that could contribute to the development of a nuclear explosive:

• Design, development, acquisition or use of computer models to simulate nuclear explosive devices.

• Design, development, manufacture, acquisition or use of multi-point explosive explosive devices suitable for a nuclear explosive device unless approved by the Joint Committee for non-nuclear purposes and subject to monitoring

• Design, development, manufacture, acquisition, or use of explosive diagnostic systems (ribbon cameras, framing cameras and X-ray cameras) suitable for the development of nuclear explosive devices.

• Design, development, manufacture, acquisition, or use of neutron explosive sources or specialized materials for explosive neutron sources.86

9. Joint Comprehensive Plan of Action

9.1. Description of the JCPOA

Usually referred to as JCPOA, this agreement is a landmark to the relations between Iran and the rest of the world, regarding its nuclear program. The agreement is a classic multilateral international treaty which is characterized by its great length and the extensive analysis of the terms in most articles, 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 (Finalization Day- 18 October 2015, Adoption Day). It is worth pointing out that the Iranian Government recognizes that its Nuclear Program is only aiming peaceful purposes, according to the perambulatory articles of the Action

Plan. Furthermore, in many areas, Iran voluntarily accepted terms regarding its nuclear program that are stricter than those in the NPT. The application of those terms is monitored by the IAEA whilst a Joint Committee oversees the application of the treaty as a whole.\(^87\)

There has been a great debate whether this agreement is legally binding or limited to non-legally binding political commitment. The fact is that even if the agreement started as a non-binding document\(^88\), its endorsement by UNSC Res. 2231\(^89\) made it legally binding, as portrayed in Articles 25 that clarify the commitment of the United Nations to accept and carry out the decisions of the Security Council in accordance with the UN Charter, and Article 48 which highlight that “every action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the Members of the United Nations or by some of them, as the Security Council may determine. Such decisions shall be carried out by the Members of the United Nations directly and through their action in the appropriate international agencies of which they are members.”

However, not all States have accepted such an interpretation, most prominently the USA. It is possible that we are looking at a hybrid agreement with some terms being legally binding but others deriving only from the States’ good will.\(^90\)

It is important to keep in mind certain key dates regarding the deal: 1) 16 January 2016, Implementation Day: the IAEA certified that Iran had taken the key steps to restrict its nuclear program and has put in place increased monitoring. The IAEA’s report triggered the sanctions relief by USA, UN and EU. 2) October 2023,


Termination Day: Ten years after Adoption day, Termination Day terminates Resolution 2231 and the Security Council closes Iran's nuclear file.

9.2. Application of/ Compliance with the JCPOA

The main pillars of the agreement deal with a) the enrichment process, b) the uranium stockpile of Iran, c) the advanced centrifuge research and development, d) the nuclear sites in Fordow, Natanz and Arak e) the monitoring and verification of the terms of the treaty and f) the gradual relief of sanctions. In this section we will present the main commitments taken up by the parties of the treaty, trying to avoid an overload of technical information.91

Firstly, regarding the uranium enrichment process, under the terms of the agreement, it is limited only at the Natanz nuclear facility whilst the site in Fordow was reconstructed to facilitate less intensive research to other non-nuclear related domains. More specifically Fordow is off limits to any uranium introduction for 15 years, converted to a research for stable isotope production with Russian aid. In the Natanz, the only uranium enrichment facility allowed but working with only a fraction of its pre-deal centrifuges, the uranium enrichment is capped to a 3.67% limit, a percentage way too low to be used for nuclear weapon development and there are, also, limitations to the number of centrifuges Iran can possess.92 Iran also committed not to pursue other methods of uranium enrichment, including laser enrichment, for the next 10 years.93

---

As far as its uranium stockpile, Iran is bound to a limit of 300 kilograms of under 3.67% enriched uranium for 15 years, whilst all excess quantities are sold or shipped away.\textsuperscript{94}

Regarding the second pathway to a nuclear weapon, the plutonium enrichment, the heavy-water reactor at Arak had its original core rendered inoperable, removed and replaced by a core commissioned by the Joint Committee. In addition, Iran is forbidden to reprocess spent nuclear fuel for 15 years, neither accumulates heavy-water for the same period, drastically curtailing its possibility to develop nuclear weapons through weapons-grade plutonium.\textsuperscript{95}

The JCPOA also imposed severe limitations on Iran’s Advanced Centrifuge Research and Development (R&D). For 10 years, the Natanz facility is allowed about 5,000 centrifuges compared to about 20,000 before the nuclear deal. The centrifuges that are allowed are the oldest and least efficient, mostly IR-1 models. Meanwhile, the IAEA confirmed that Iran had removed excess centrifuges and infrastructure from the Fordow Fuel Enrichment Plant, in line with the JCPOA requirements.\textsuperscript{96}

Iran is allowed to continue to conduct enrichment for R&D "in a manner that does not accumulate enriched uranium". Annex I of the JCPOA limits Iran's enrichment centrifuge R&D work to the IR-4, IR-5, IR-6 and IR-8 designs only.\textsuperscript{97}

machines may begin. Those restrictions imposed on Iran are also monitored by the Joint Committee.\textsuperscript{98}

9.3. Compliance of Iran

The sanctions were to be relieved only when Iran was able to abide by the provisions of the Action Plan. In a first stage Iran fully realized all the needed prerequisites for the implementation of the agreement (Implementation Day). Since then and according to the IAEA’s reports,\textsuperscript{99} Iran continues to uphold the terms of the agreement even after USA’s withdrawal from the JCPOA. More specifically Iran could be faster and more proactive in allowing snap inspections but in its first such report since USA’s withdrawal Iran remained within limits on the level to which it can enrich uranium and its stock of enriched uranium. Short-notice inspections are also taking place with complementary accesses under the agency’s privilege in the Additional Protocol of the agreement, which Iran is implementing under the deal. As a whole Iran is complying with its requirements for providing access even though its cooperation times could be faster so as to enhance confidence between the parties.\textsuperscript{100}

It is worth noticing that early on Iran twice exceeded the amount of heavy water that it is allowed under the agreement, the IAEA reported, but these were quickly resolved without further problems and causes for worry.\textsuperscript{101}

The first- and so far only- cause for worry was given on January 2017, when Iran for the first time injected uranium hexafluoride (UF6) gas into its IR-8 uranium enrichment centrifuges. The Atomic Energy Organization of Iran (AEOI) said the development of the next-generation centrifuges is being carried out within the


framework of the Joint Comprehensive Plan of Action (JCPOA). The design has an enrichment capacity about twenty times that of the first-generation IR-1 centrifuges already in operation in Iran, and had been undergoing mechanical testing for the previous three years.¹⁰²

According to Annex I of the JCPOA, Iran's enrichment centrifuge Research & Development work is limited to the IR-4, IR-5, IR-6 and IR-8 designs only. For the IR-8, only single machines can be tested for the first eight and a half years after the implementation of the agreement, after which testing of cascades of up to 30 machines may begin. This means that, typically Iran is not in violation of the agreement although such experimentations did not aid in enhancing confidence between the involved parties.¹⁰³

9.4 Monitoring

Iran’s nuclear activities are being monitored by two bodies, Firstly, the IAEA’s inspectors who, under the terms of the agreement, have an unprecedented access to Iran’s nuclear facilities and submit reports to the Security Council regarding Iran’s compliance to the JCPOA. Secondly, the Joint Commission, with all the negotiating parties represented, to monitor the implementation of the whole agreement. This body is also charged with the activation of the dispute resolution mechanism, if such a need be presented. It also oversees the transfer of nuclear-related or dual-use materials from and in Iran.¹⁰⁴

Under the JCPOA, the IAEA will have the authority to inspect and monitor to confirm that Iran it is implementing the JCPOA’s terms. Monitoring measures include:

- For 25 years, declaration and monitoring of all of Iran’s stocks of uranium ore concentrate, which could be converted into uranium hexafluoride for enrichment.

- For 20 years, declaration and monitoring of Iran’s stocks of centrifuge rotors and bellows that it could use to make new centrifuges, along with key equipment for centrifuge production (such as flow-forming machines for metal centrifuges and filament-winding machines for those made of carbon fiber).

- For 15 years, continuous monitoring of excess centrifuges stored in Natanz Hall B.

- For 10 years, mandatory use of Procurement Channel\textsuperscript{105}

In addition, the AP obliges Iran to provide IAEA with additional information on its nuclear program, the location of nuclear facilities and other sites normally associated with the production and conduct of nuclear research, exports and imports of nuclear equipment. In particular, the AP requires Iran to declare information on research and development activities carried out on uranium plants, as well as information on the processing and management of plutonium procedures.\textsuperscript{106}

\section*{10. Recent Developments}

The JCPOA was a turning point for the relations of Iran with the Western world. Being a long time ally of the Russian Federation, Iran’s relations with the West and Israel were, at best, troublesome, in light of its nuclear activities. Since the signing of the agreement the European States have shown greater interchangeability in their dealings with the Iranian government, upholding their part of lifting economic sanctions. On the other hand the Trump Administration has shown an attitude towards


escalating tensions and keeping a harsher stance against Iran and withdrawing from the JCPOA.\textsuperscript{107}

A move discouraged by most other countries but not Israel who continues to show great distrust towards Iranian activities in the region, continuing a long tradition of hate and mutual wish for disaster on both sides.\textsuperscript{108}

The US President, using as pretext the continuation of Iran's nuclear program and the existence of undeclared nuclear facilities in the Iranian Republic state that: “America cannot wait cannot prevent an Iranian bomb under the decaying and rotten structure of the current agreement.”. Thus the President announced and justified his decision. “Therefore, I am announcing today that the United States will withdraw from the Iran nuclear deal.”

The breakaway from the Nuclear Deal was one of his most important Electoral Promises. Furthermore, Trump’s Iran New Policy is triggered because he is trying to follow an anti-Obama foreign policy, based on restrictionism, economic nationalism and protectionism.

After the unilateral withdrawal of the USA from the nuclear agreement signed during the Obama administration, the US Treasury Department has put into effect the first phase of sanctions against Iran on August 7\textsuperscript{th} 2018. The second phase of sanctions began on 5 November following the 180-day deadline announced by the US Treasury Department. The sanctions announced by the US target mainly Iran's energy and banking sector, logistics and insurance companies.

The US with the sanctions that came into force in the first phase with the sanctions that came into force in the first phase, intended to:

- Prevent Iran from accessing the US dollar


• Sell the country government bonds

• Bring barriers to trade in gold, precious metals, steel, aluminum and coal.

While international restrictions have been imposed in the second phase of sanction concerning:

• The National Iranian Petroleum Company

• The Iranian Oil Trading Company and the National Iranian Tanker Company.

• Selling oil and its producers.

Furthermore, one of the significant sanctions imposed on Iran following the unilateral withdrawal of US President Donald Trump from the nuclear agreement is the SWIFT system that ensures electronic money transfer worldwide. The announcement issued by SWIFT's center on US sanctions noted that SWIFT has suspended the access of certain Iranian banks to the system. Financial institutions were also included in sanctions imposed against Iran. The procedures of foreign financial institutions to the Iranian Central Bank and some financial institutions have been limited. As for the sanctions, the United States Treasury Department has announced that more than 700 Iranians and Iranian companies have been also included in the blacklist.

At the same time there were specific areas targeted at the US Treasury Department's sanctions against Iran. More specifically, the maritime sector including port management, navigation and shipbuilding, the trade and especially the maritime transport, which are a key sector of the Teheran economy. Last the Iranian financial institution, as well as those who are dealing with as well as those who deal with the Iranian central bank. Only eight countries worldwide, China, India, Japan, South
Korea, Taiwan, Turkey, Italy and Greece were exempted from the sanctions for the import of Iranian oil for a six-month period.\textsuperscript{109}

After Trump’s decision, Head of States/ Government of France, Germany, and the United Kingdom noted pointedly their “continuing commitment” to the deal, and clarify in their joint statement, that the United Nations Security Council resolution endorsing the nuclear deal remained the “binding international legal framework for the resolution of the dispute.”\textsuperscript{110}

However, we have to mention that the European signatories to the JCPOA have implemented a package of financial measures in order to deal with the agreement. In addition, the European Union will initiate, as of August 7, a Directive "on the protection of EU businesses engaged in legal transactions with Iran from the impact of US extraterritorial sanctions".

Participants acknowledged that Iran has continued to fully and effectively implement its commitments on nuclear energy, as confirmed by twelve successive reports by the International Atomic Energy Agency, and it reiterated the need to be continued. Also, participants will continue to support the modernization of the Arak research reactor within the JCPOA and the conversion of the Fordow site into a nuclear, physical and technological center. Participants also confirmed their support for projects in the field of civilian nuclear cooperation under Annex III of the JCPOA.


Participants acknowledged that the lifting of the sanctions, including financial dividends resulting from it, along with the implementation of Iran's commitments on nuclear activities, is an essential part of the JCPOA.\textsuperscript{111}

Participants, further, underlined their determination to protect legitimate businesses with Iran, fully respecting UN Security Council Resolution 2231.

In addition to fear of the possible construction of Iranian nuclear in the future, Trump's decision aims to prevent European businesses from being active in Iran. Typical examples are: Total of France, which has launched its coastal gas research on Iran's coasts. Siemens Germany has completed the agreement with Tehran for the delivery of traction engines. France's Airbus, operating in Iran, immediately after the Nuclear Pact was signed to replace Iran Air's aging fleet with more than 100 aircraft.\textsuperscript{112} In order to save the Nuclear Arrangement, Tehran's strategy plays an important role, but also whether Europe has formulated any "B" plan. So far EU Commissioner Mogherini states that "As long as Iran continues to implement its nuclear commitments as it has done so far, the European Union will continue to commit to continuing the full and effective implementation of the nuclear agreement. confidence in the work, capacity and autonomy of the International Atomic Energy Agency, which has published 10 reports that Iran has fully complied with its commitments.

\textbf{11. Conclusion}

Iran and the Allied countries argue that the nuclear program is important for the development of citizens' living standards and the prevention of conflicts between states. On the other hand, many countries are afraid that the risk of nuclear


proliferation and the irresponsible management of nuclear energy are undermined by the possession of nuclear weapons. States build nuclear to increase somehow the security of their nation, but also because the nuclear weapons can be used as potential political tools for the promotion of domestic, regional and international geostrategic, and economic interests. A country like Iran to hold nuclear weapons must follow and meet the current obligations of the international community for the production and management of nuclear weapons. The JCPOA set out guidelines for the country's nuclear program, facilities and capabilities. Iran also implement the Additional Protocol to its IAEA safeguards agreement, which together with other measures under the JCPOA to increase the agency’s ability to monitor nuclear activities in Iran and verify that they are peaceful. Key strategies to prevent proliferation of nuclear arms include limiting the number of operating uranium enrichment plants and controlling the export of nuclear technology and fissile material. Recent developments, with the withdrawal of the US from the agreement, show that a multilateral international agreement could be vulnerable to political interests and alliances. By abandoning the agreement, USA set a new round of sanctions, creating new turmoil and uncertainty in the wider MENA region.

12. Points to be addressed

Through an extensive examination of the information and facts provided in the previous sections, it is evident that this grave matter raises questions that the
committee is highly encouraged to analyze and discuss. Having in mind that our goal is to conclude with proposals and solutions, here are some of the points that should be addressed by the committee:

- What is the legal status of the JCPOA regarding the Member States involved?
- What is the significance of the United Nations Security Council Resolution 2231?
- How does Iran comply with its commitments under the JCPOA?
- What is the significance, in strategic terms, of possession of nuclear weapons?
- How has the JCPOA affected Iran’s nuclear program and what concerns are still being present?
- How has the JCPOA affected Iran's foreign relations?
- What military nuclear capabilities can Iran possess, taking into consideration the uranium enrichment restrictions?
- Can the plutonium enrichment set a viable alternative to the development of nuclear weapons by Iran?
- How effectively could Iran's actions be monitored by the international community? How would a “nuclear Iran” affect the region and the globe in general?

13. Bibliography

United Nations Office for Disarmament Affairs. The Role of the UN Office for Disarmament Affairs (UNODA) in support of the Committee established pursuant to


from:https://www.treasury.gov/resource-center/sanctions/Programs/Documents/Executive%20Order%2012282.pdf


