Turkey's Nuclear Program: Challenges and Prospects for Future

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ABSTRACT

Main objective of this thesis is to understand why Turkey keeps the nuclear option on the table since 1950s? It will give an account of the past nuclear programs, and explain why Turkey still seeks the nuclear option considering its right to acquire civilian nuclear program. It will employ the domestic politics model and the security model as well as the strategic military culture model as an additional theoretical framework ‘n order to understand Turkey’s intentions. The strategic military culture is defined as the set of shared narratives, assumptions and beliefs, which shape the strategic decision-making process of a country. Hence, it will focus on three key elements of Turkish strategic military culture that have an impact on nuclear hedging strategy and its drive for nuclear technology. The thesis will focus on Turkey’s threat perception, Turkish nationalism, and its love/hate relationship with the West. The thesis will make use of primary as well as secondary sources. It will mainly consist of mainly agreements, protocols and interviews with prominent international experts and scholars.

Keywords: Turkey, Nuclear Energy, Strategic Military Culture Model, Domestic Model, Security Model

ÖZ

Bu tezin temel amacı neden Türkiye'nin 1950'lerden itibaren nükleer seçeneğini gündemde tutmaya devam ettiğini anlamaktır. Türkiye'nin nükleer enerji konusunda uzun zamanlı bir ilişkisi olup, bazı zorluklardan dolayı nükleer enerjinin sonlandırılmasından, nükleer silahlanmanın yayılması ve yayılmasının önlenmesi gibi konulardan meydana gelen birçok farklı perspektifler olmuştur. Türkiye'nin sivil bir nükleer enerji programı sahip olma hakkını göz önünde bulundurarak, geçmiş nükleer programları hakkında ve daha sonra Türkiye'nin neden hala nükleer seçeneği istediği konusunda açıklamada bulunulacaktır. Bununla birlikte, iç politika modeli ve güvenlik modeline ek olarak bu çalışma Türkiye konusunda kullanılacak alternatif bir çerçeve olması adına stratejik askeri kültür modelini de inceleyecektir. Bir ülkenin stratejik olarak karar verme sürecini şekillendiren stratejik askeri kültür paylaşılan hikayeler, varsayımlar ve inançlar dizisi olarak tanımlanmıştır. Bu sebeple, bu tez nükleer risklerden korunma stratejisi ve nükleer teknoloji kullanımı üzerinde etkisi olan stratejik Türk askeri kültürünün üç temel unsuruna odaklanmaktadır. Tez, tehdit algısı, Türk Milliyetçiliği ve Bati ile olan sevgi/nefret ilişkisine odaklanacaktır. Tez birincil ve ikincil bilgilerden faydalanacaktır. Daha çok anlaşmalar, protokoller ve uluslararası alanda önde gelen uzman ve bilginler ile röportajları içerecektir.

Anahtar Kelimeler: Turkiye, Nükleer Enerji, İç Politika Modeli, Stratejik Askeri Kültür Modeli, Güvenlik Modeli

To My Family

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LIST OF ABBREVATIONS

AEA	The Atomic Energy Act
AECL	The Atomic Energy of Canada Limited
AK-P	Justice and Development Party
AMAA	The Army Mutual Assistance Association
ANRTC	The Ankara Nuclear Research and Training Centre
BOO	Build Own Operate
BOT	Build Own Transfer
BWC	The Biological Weapons Convention
CHP	Republican People's Party
CTBT	The Comprehensive Nuclear Test Ban Treaty
CWC	The Chemical Weapons Convention
ÇNAEM	The Çekmece Nuclear Research and Training Centre
DISF	Defense Industry Support Fund
DMG	Dogan Media Group
EMASYA	Emniyet Asayiş Yardimlaşma Protokolü
EU	The European Union
EUAŞ	The Electric Generation Company
GCC	Gulf Cooperation Council
GE	General Electric
GICNT	The Global Initiative to Combat Nuclear Terrorism
HEU	Highly Enriched Uranium
IAEA	The International Atomic Energy Agency
IMF	The International Monetary Fund

INIR	The Integrated Nuclear Infrastructure Review
IS	Islamic State
KEPCO	The Korea Electric Power Corporation
LEU	Low Enriched Uranium
LLRWWMU	The Low-Level Radioactive Waste Management Unit
MENR	The Ministry of Energy and Natural Resources
MHI	Mitsubishi Heavy Reactors
MHP	Nationalist Movement Party (Milliyetci Halk Partisi)
MTCR	The Missile Technology Control Regime
MFA	The Ministry of Foreign Affairs
NAP	National Action Party-Milliyetçi Hareket Partisi
NATO	The North Atlantic Treaty Organization
NDM	National Democratic Movement-Milli Demokratik Devrim
NIS	The National Intelligence Service-Milli Istihbarat Teskilati
NPT	The Non-Proliferation Treaty
NSC	The National Security Council
NSG	The Nuclear Suppliers Group
OECD	The Organization for Economic Cooperation and Development
PHWR	Pressurized Heavy Water Reactor
PKK	Kurdistan Worker's Party
PSCP	The Public Security Cooperation Protocol
PSI	Proliferation Security Initiative
RCD	Regional Cooperation for Development
RWMD	Radioactive Waste Management Division
SACT	The Seabed Arms Control Treaty

SNTPC	State Nuclear Power Technology Corporation
TAEA	Turkish Atomic Energy Authority (TAEK)
TAEC	Turkish Atomic Energy Commission
TAF	Turkish Army Force
TEAS	Turkish Electricity Generation and Transmission Company
TEDAŞ	Turkish Electricity Distribution Company
TEK	Turkish Electricity Authority
TGNA	The Grand National Assembly of Turkey
TNW	Tactical Nuclear Weapons
UNSCOM	United Nations Special Commission on Iraq
URI	Uranium Resources Inc.
WMD	Weapons of Mass Destruction
ZC	Zangger Committee

Chapter 1

INTRODUCTION

The 'Atoms for Peace' program provided the main pillars for Turkey to access such nuclear technology and to create its own nuclear facilities. After Eisenhower's 'Atoms for Peace' initiative speech at the Geneva Conference, Turkey started considering the development of peaceful nuclear energy. In the mid 1950's, Turkey's dependency on foreign energy sources reached an alarming 57%. To redress this, Turkey sought to the exploration of atomic energy in a bid to ease its dependency on foreign energy import. This culminated into the signing of the World's first Atom for Peace nuclear cooperation for peaceful purposes between the United States (U.S.) and the Republic of Turkey under the Atomic Energy Act (AEA/54) in 1955.[1] In the same spirit, the Republic of Turkey established the Turkish Atomic Energy Commission (TAEC) under the control of the Prime Ministry in order to coordinate efforts to build nuclear research and to issue licenses for nuclear power plants in 1956.[2] A 1 megawatt research reactor and training center was established in Küçük Çekmece in 1962 with the name; Çekmece Nuclear Research and Training Centre (ÇNAEM). A year later, the Ministry of Energy and Natural Resources was founded. Then in 1966, the Ankara Nuclear Research and Training Center (ANRTC) were established in the capital, to carry out more research on the use of nuclear energy and technology. Turkey sought more

[1] Stein Aeron, "Turkey's Nuclear History Holds Lesson for the Future," *The Nonprliferation Review* (2013): 1-4.

[2]Kibaroglu Mustafa, "Turkey's Quest for Peaceful Nuclear Power" *the Nonproliferation Review* (1997): 33-44.

knowledge in an attempt to enhance its nuclear technology, and hence use this nuclear technology to support in the production of electricity for the country.[3]

Turkey became party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and openly signed it on the 29th of January, 1969, and later, ratified it on April 17, 1980. It's long standing alliance with NATO since 1952, as well as its strong will against the proliferation of Weapons of Mass Destruction (WMD), and its commitment to the establishment of a nuclear free zone made Turkey sign the NPT.[4] Signing the NPT clearly meant an agreement on the abandonment of its desires to pursue nuclear material for militaristic purposes. Notwithstanding, Turkey gained easy access to peaceful nuclear energy.

Access to peaceful nuclear energy was the policy of America within the 'Atoms for Peace program'. However, the Cuban Missile Crisis in the 1960s, made the Kennedy administration reconsider the Eisenhower strategy on the use of nuclear weapons. In meantime, and as part of its commitment to NATO, Turkey had been hosting American tactical nuclear bombs, since the February of 1959, known as the 'Jupiter missiles'.

The Turkish fear of a Soviet attack on its territory was calmed by the presence of the 'Jupiter missiles' which stood as a symbol of the United States' willingness to use nuclear tactical weapons against any potential Soviet invasion in Turkey. Thus, the forward deployment of this missile system was crucial for Turkey's defense against

[3] Turkish Atomic Energy Authority, History, Monday, 4 October, 2010. Available at: http://taek.gov.tr/en/institutional/history.html

[4] Ulgen Sinan, The Security Dimensions of Turkey's Nuclear Program: Nuclear Diplomacy and Non Proliferation Policies, for more information: http://www.edam.org.tr/edamnukleer/section5.pdf

the Soviet Union.[5] The deployment of the Jupiter Missiles in Turkey was of vital importance in cases of emergency. Thus, in the agreement on the placement of the nuclear weapons in the Mediterranean, Ankara made three demands;

> 1) They wanted a missile key,
>
> 2) They wanted the agreement to be completed before Foreign Minister Zorlu visited the UN General Assembly and
>
> 3) And they wanted the funding for the missiles to come from the U.S. military assistance program.[6]

Ankara's demands were clear and highly ambitious, especially regarding possession a missile key which gave Turkey the authority to be able to launch the missiles in cases of emergencies. Not forgetting the fact that they had to be trained by American military personnel as well.

Turkish interest on this issue was clearly visible in 1965, when it was a member of the Working Group on Nuclear Planning; "when a Turkish representative is known to have proposed that advance authority be given to NATO commanders to use tactical nuclear weapons by passing political consultation in an emergency."[7]

In the beginning of the 1970s, Turkey made a second attempt to carry out comprehensive feasibility, site selection and bid specification studies for 600 MWe

[5]Turkey's Nuclear Missiles: An Important Player in the Cuban Missile Crises, *Word Press*, November 4, 2012. Available at: https: //turkeywonk.wordpress.com/2012/11/04/turkeys-nuclear-missiles-an-important-player-in-the-cuban-missile-crisis/

[6] Stein Aaron, "Turkey and the Dual-Key Arrangement: Ankara's Interest in using Nuclear Weapons," Word Press, December 5, 2013. Available at: https://turkeywonk.wordpress.com/2013/12/05/turkey-and-the-dual-key-arrangement-ankaras-interest-in-using-nuclear-weapons/

[7]Campbell Kurt M., Einhorn Robert J., Reiss Mitchell B., "The Nuclear Tipping Point" Brookings Institution Press, 2005, p. 149.

nuclear power plant. Later on, TAEC issued a license for the Akkuyu site selected by the Turkish Electricity Authority (TEK) with the consultation of one French, and three Swiss firms for the construction of the second nuclear power plant and fuel service. Then, in 1977 two Swedish firms Asea-Atom and State Laval started financing the investment.[8] With such an agreement with the French and Swiss firms, TAEC aimed to accomplish and to carry out some primary functions such as; to generate electricity from nuclear power plants for the national grid; extensive atomic research; and the training of specialist at all levels on nuclear science and technology, in order to develop alternative sources of this energy.

Having said that, Turkey started to operate the 250 kilowatts thermal Triga Mark II research reactor, and in the late 70s and beginning of the 1980's the TR-2 research reactor was operated by a five MWe pool-type research reactor. At the same time, Turkey had also selected the site for the second nuclear power plant by the NPP division of TEK. One of the primary challenges since the beginning of the acquirement of the nuclear technology by Turkey was a lack of expertise and personnel in the field of nuclear science and the necessary technology associated to this matter.

The early 1980's Turkey developed strong ties with Pakistan, which started back in the 1950s. The U.S. was concerned about the Turkish-Pakistan relationship, fearing that the main aim of this relationship was the transportation of dual-purpose uranium enrichment technology from Turkey to Pakistan.[9] It is worthy of noting that the majority of the nuclear materials smuggled from the West to Pakistan continued to

[8]Kibaroglu Mustafa, "Turkey's Quest For Peaceful Nuclear Power" the Nonproliferation Review/Spring-Summer 1997

[9]Campbell Kurt M., Einhorn Robert J., Reiss Mitchell B., "The Nuclear Tipping Point" Brookings Institution Press, 2005, p. 149.

move through Turkey in 1984.[10] In fact, Turkey and Pakistan were members to the Regional Cooperation for Development (RCD). Ideology (Islam) played a significant role in this partnership, and visa requirements were lifted. In this same light, the two countries began searching for avenues for expanding their trading relations. Therefore, for the sake of strengthening the ties and establishing trade between the two countries, Turkey and Pakistan joined in the commission for Economic and Technical Cooperation[11] One of the significant reasons for this alliance was that Turkey was dependent on other countries for imports, and so the deal with Pakistan was very important, and by the late 1970s, and it could be clearly seen that Pakistani importers were keen on buying "chemicals"[12] from Turkey and Turkey was keen on importing "entirely new items of Pakistan."[13]

This drastic increase in trade between these two Muslim countries brought high concerns and suspicions in the U.S. and North Atlantic Treaty Organization (NATO) especially with regards to the transfer of nuclear material and technology. To that end, Washington threatened Turkey with a seizure of economic aid, while NATO blocked Pakistan's uranium enrichment program. Additionally, the U.S. applied military and economic sanctions on Pakistan with the aim of stopping the development of its nuclear weaponry system. With all the threats on Turkey and the sanctions imposed on Pakistan's enrichment program, Pakistani President Ziaul-Haq seeked to establish talks with Turkey, taking advantage of his religious background (identity) with his

[10]Ibid. p. 61.

[11]Ahmad Naved, Pakistan-Turkey Relations, Pakistan Horizon, Vol. 34. No.1. The Inter-Relation of Muslim States and Pakistan (First Quarter 1981), pp. 105-128

[12]Ibid. p.123.

[13]Ibid. p.124.

Turkish counterpart President Kenan Evren."[14] Evren, on the other hand, responded that "there had been nuclear enrichment exports from Turkey to Pakistan,"[15] although, later these claims were said to be false by the Council of Ministers. At the same time, there were allegations by the Greeks that Turkey was expected to send inverter materials for a nuclear bomb, and in return Pakistan was to reciprocate by sharing the nuclear bomb technology with Turkey.[16] Furthermore, it is also claimed that Pakistan provided advanced training for Turkish scientists in Pakistani nuclear facility sites.[17]

The impact of ideology and religion on the two countries, and the continuous attempts by the International Community in preventing Turkey's acquisition of nuclear technology, was clearly visible especially in the case of Turkey. As the government step up its efforts toward obtaining nuclear technology. Firstly, in 1982, TAEC which had been established to develop nuclear research and training centers was replaced and reorganized with the creation of the Turkish Atomic Energy Authority (TAEK)[18] under the auspices of the prime ministry.

Furthermore, Ankara invited three more companies for the construction of three or four nuclear power plants in the region. Turkey sent intent letters to the West German Siemens-Kraftwerk Union for the Construction of a 990MWe pressurized water reactor in Akkuyu. For the 655 MWeCandu reactor, Turkey wanted to work with the

[14]Ibid. Mustafa Kibaroglu.

[15]Ibid. Nuclear Tipping Point.

[16]The National Security Archive, "the U.S.-Pakistan Nuclear Relaions." US Department of State, 21 January 2015. Available at:http: //nsarchive.gwu.edu/nukevault/ebb531-U.S.-Pakistan-Nuclear-Relations,-1984-1985/documents/Doc%208A%2010-3-84%20call%20from%20Hersh.pdf

[17] Ibid. Nuclear Tipping Point

[18]NTI, "Turkish Atomic Energy Authority," updated March 1, 2011. Available at: http://www.nti.org/learn/facilities/490/

Atomic Energy of Canada Limited (AECL), and for the operation of the last two boiling reactors in Inceburun, Sinop, Tukey intended to work with General Electric (GE) in the United States.

Within the scope of these attempts, Ankara's and President Ozal's preference strategically was on building nuclear power plants, preferably Build-Operate-Transfer (BOT) financing models. The reason why Turkey preferred this model at that time was that, with the BOT type of nuclear facilities, the contractor company pays for the construction, operating costs of the nuclear arsenal, and operates the facility for roughly 15 years. In this regard, Turkey was going to recoup its expenses as well gain considerable profit, when the nuclear facility was eventually transferred to the host government.

For Turkey, the 1980s was also a period for focusing on strengthening capacity at the institutional level in the nuclear field, as well as ratification and signed international agreements such as; the ratification of the Non-Proliferation of Nuclear Weapons Treaty (NPT) on 17 April 1980, which was signed in 1969,[19] as well as the International Atomic Energy Agency (IAEA) safeguards. Turkey also became a member of the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD).

[19] United Nations Office for Disarmament Affairs (UNODA), "Treaty on the Non-Proliferation of Nuclear Weapons" United Nations, 2016. Available at: http://disarmament.un.org/treaties/t/npt

The United States and the International Community was concern about Turkey's potential to develop nuclear power and usage of this power and technology to acquire nuclear proliferation, as Pakistan had done,[20] was exacerbated in 1989 when Ghulam Sarwar Cheema, Pakistani federal minister of defense was interviewed in Istanbul and he noted:

> The accumulated knowledge in one country should be shared by the other between Turkey and Pakistan, Cheema said: I am afraid that everyone knows what the other does in this world... The Western countries have tried to prevent us from moving together and they will continue to do so in the future... Regardless of the strenuous effort made by the Christian world, fraternal relations between Turkey and Pakistan have increased. It is as if we have integrated to become a single whole (Campbell, Einhorn, Reiss-p.163).

As a result of these allegations and suspicions about the Turkish-Pakistani relationship, Canada withdrew its support from Turkey in the quest for its obtainment of nuclear power. West Germany also withdrew its support, and ended the agreement.

To make matters worse, the Chernobyl disaster of 1986, also gave rise to domestic opposition against the nuclear program in Turkey. Turkish government officials rejected the effects of the accident. For instance, Cahit Aral who was the minister of industry and trade, as well as the previous environment minister Dogan Akyurek, claimed that tea was not contaminated, as some opposition claimed. TAEK and the Parliaments Cancer Research Committee also announced that the radiation in the tea and nuts was harmless.[21] However, the Turkish Chambers of Physicians established a report, specifying that 47.9% of the deaths in Black Sea Region, especially in Artvin

[20] Jewell Jessica, Ates Ahmet Seyithan, "Introducing nuclear power in Turkey: A historic state and future prospects," *Energy Research & Social Science* 10 (2015): 273-282.
[21] Daily Sabah Turkey, "Chernobyl Effects in Turkey 28 years later," AA, April 27, 2014. Available at: http://www.dailysabah.com/nation/2014/04/27/chernobyl-effects-in-turkey-28-years-later

and Rize were as a result of cancer. Also, Dr. Kayahan Pala who worked in a village near Rize between 1988 to1990 observed a rise in abnormal births within that time period. Yet, Northern Turkish residents were encouraged to carry on consuming the tea, nuts and fish by government officials.[22] These political factors along with financial disagreements with contractor companies as well as the International Community's suspicions on the Turkey-Pakistan Islamic relationship spelled the death of the Turkish nuclear program.

Notwithstanding, the desire to continue developing its nuclear power plants for peaceful purposes especially that of providing electricity and power kept Turkey's hope of nuclear technology alive, particularly, as the president of the Turkish Atomic Energy Commission Mr. Ergin reported; "nuclear power brings prestige to the nation,"[23] and with this nuclear technology Turkey was believed to be an honorable and strong country, because nuclear technology consists of strategic power and economic components.[24]

1.1 Literature Review

Realism is a model of international relations (IR) that "self-interested states compete for power and security" vis-à-vis the use of diplomacy and coercive power.[25] The realist models that consist of classical realism, neo-realism, defensive and offensive

[22] Egrikavuk Isil, "Chernobyl Still Haunts Turkey's Black Sea Coast," Hurriyet Daily News, March 18, 2011. Available at: http://www.hurriyetdailynews.com/default.aspx?pageid=438&n=the-haunting-memories-of-chernobyl-2011-03-18

[23] Akcay B., "The Case of Nuclear Energy in Turkey: From Chernobyl to Akkuyu Nuclear Power Plant," *Energy Sources* 4 (2009): 347-355.

[24] Ibid. p.351

[25] Jack Snyder, "One World, Rival Theories," *Foreign Policy*, November-December 2004, p. 59.

realism, as well as neo-classical realism are arguably the main models employed to explain the Turkish nuclear option. Classical realism maintains that while each state is unique internally, states struggle to maximize their power to safeguard their national interests in the international system. Moreover, according to realist scholars' humans tend to rule and pursue their self-interests. Thus, there is a perpetual conflict among states to maximize power in order to survive and avoid subjugation. Realists contend that nuclear weapons are aspired when states perceive security threats.

Liberal theories, on the other hand, do not agree with the unitary actor assumptions (state is the primary/sole actor in the international system) of the realists. The advocates of liberal theories emphasize the significance of domestic politics. Thereby, nuclear weapons are regarded as exclusively a national security tool. Prominent scholar Scott Sagan presents three main domestic actors together with a state's decision to pursue nuclear proliferation. First and foremost, the nuclear energy establishment can be one of the key actors, including companies and scientific institutions. Second, the military can also be counted as a domestic bureaucratic actor. Lastly, political leaders in order to gain more popularity and garner public support tend to take advantage of the nuclear weapons issue. In order to comprehend the internal domestic debates between political leaders it is essential to grasp that state's decision to proliferate. According to Sagan, "The notion of emerging or diminishing threats can be used in the internal debate to create momentum either for or against nuclear weapons."[26] Thereby, Sagan contends that "decisions pertaining to nuclear armament or disarmament are not only made in agreement with these alleged threats but also due

[26]Scott D. Sagan, Why Do States Build Nuclear Weapons?: Three Models in Search of a Bomb. International Security, Vol. 21, No. 3. (Winter, 1996-1997), p. 65.

to internal political changes and power struggles."[27] Hence, nuclear weapons programs are not inevitable or obvious solutions to international security problems, rather they try to justify their existence.[28] George Perkovich claims that the driving force of India's nuclear weapons program were domestic factors more than external security concerns.[29] For instance, Prime Minister Atal Bihari Vajpayee to generate domestic public support for his nationalist Bharatiya Janata Party.[30] Even meeting security threats are significant for national interest; nevertheless rational analysis of the threat environment may also support to display alternative motivations.

There are also numerous studies concentrating particularly on the relationship between nuclear proliferation and domestic political institutions. For example, democratic peace literature has focused on the differences between autocracies and democracies. First, various scholars have maintained that democracies are less likely to pursue nuclear weapons. Glenn Chafetz claims that democracies are able to restrain the security dilemmas which may, in turn, cause nuclear proliferation. "With the spread of democracy comes a reduced threat of nuclear proliferation."[31] Sasikumar and Way stress that democracies are more transparent compared to autocratic regimes\ which can hinder security elites to upkeep a nuclear program in a sheltered "strategic

[27] Sagan, p.69.

[28] Scott D. Sagan, Why Do States Build Nuclear Weapons?: Three Models in Search of a Bomb. International Security, Vol. 21, No. 3. (Winter, 1996-1997), pp. 54-86.

[29] George Perkovich, in *Dangerous Deterrent: Nuclear Weapons Proliferation and Conflict in South Asia*, (NUS Press), 2009, p.83. Peter Beckman et. Al, The Nuclear Predicament: Nuclear Weapons in the Twenty-First Century, thir ed. (Upper Saddle River, NJ: Prentice Hall, 2000), pp.214-215.

[31] Glenn Chafetz, "The End of the Cold War and the Future of Nuclear Proliferation: An Alternative to the Neorealist Perspective," in The Proliferation Puzzle: Why Nuclear Weapons Spread (And What Results), eds. Z. S Davis and B. Frankel, Portland: Frank Cass & Company, 1993.

enclave."[32] Democratic states make a commitment to non-proliferation by joining the NPT. In turn, some scholars argue that these commitments are more enduring.[33] Last but not least, Joseph Cirincione emphasizes that civil society and citizen campaigns against nuclear weapons can also have an impact on policy. Consequently, "campaigns are more likely to be effective in democratic societies."[34]

On the contrary, there are other scholars whom contend that regime type no or little impact on nuclear proliferation. "This is based on the premise that motivations for proliferation are largely similar among all states, regardless of whether the state is democratic or autocratic."[35] For example, studies concentrating on the role of particular leaders have not correlated "leader characteristics to regime type."[36]In addition, there are studies which have focused particularly on "strategies of regime survival." They state that for the sake of stay in power, leaders who are inward-looking are prepared to endure the costs of proliferation.[37] Finally, Snyder stresses that democracy can indeed bolster proliferation because democratic governments may be tend to accommodate nationalist populations since they aspire to extend their

[32] Karthika Sasikumar and Christopher Way, "Testing Theories of Nuclear Proliferation: The Case of South Asia," in Inside Nuclear South Asia, Ed. Scott D. Sagan, Stanford, CA: Stanford Security Studies, 2009.

[33] Ibid, pp. 7-18

[34] Joseph Cirincione, Bomb Scare: The History and Future of Nuclear Weapons, 1st ed. Columbia University Press, 2008.

[35] Alexander H. Montgomery, "Ringing in proliferation: How to dismantle an atomic bomb network," International Security 30 (2007), pp. 153-187.

[36] Jacques E. C. Hymans, The Psychology of Nuclear Proliferation: Identity, Emotions and Foreign Policy, Cambridge University Press, 2006.

[37] Etel Solingen, Nuclear Logics: Contrasting Paths in East Asia & the Middle East, Princeton University Press, Princeton, NJ: 2007.

networks, thus retain power.[38] This can be observed when studying countries like India, Pakistan and France, where nuclear weapon programs have had substantial public support. This suggests that even democratic governments with quite transparent political systems may also seek to possess nuclear weapons. Correspondingly, empirical studies have failed to provide substantial evidence to prove that autocracies and democracies have dissimilar rates of nuclear proliferation. For instance, in 2004, Singh and Way conducted a cross-national statistical analysis of nuclear proliferation, where scholars' came across no clear evidence of democracy on either the pursuit or exploration of nuclear weapons.[39] Moreover, Jo and Gartzke found that democracy has a miner effect on both nuclear acquisition and pursuit. In turn, they deduce that "an emphasis on regime type is not necessary."[40]

Michael Horowitz finds no relationship between a country's political entities (Polity score) and its prospect of pursuing a nuclear weapons program.[41] Moreover, Fuhrmann explores the link between proliferation and civilian nuclear technology, and finds no interrelations between weapons proliferation and democracy.[42] Furthermore, qualitative methods have provided parallel deductions. Campbell, Einhorn, and Reiss found mixed evidence that democratic institutions have a significant impact a state's

[38] J.L. Snyder, From voting to violence: democratization and nationalist conflict, New York: W.W. Norton, 2000.

[39] Sonali Singh and Christopher Way, "The Correlates of Nuclear Proliferation," Journal of Conflict Resolution 48 (2004), pp. 859-885.

[40] Dong-Joon Jo and Erik Gartzke, "Determinants of Nuclear Weapons Proliferation" The Journal of Conflict Resolution 51 (2007), p.167.

[41] Michael Horowitz, The diffusion of military power!: causes and consequences for international politics, Princeton, NJ: Princeton University Press, 2010.

[42] Matthew Fuhrmann, "Spreading Temptation: Proliferation and Peaceful Nuclear Cooperation Agreements," International Security 34 (2009), pp. 7-41.

pursuit of nuclear weapons, by employing comparative case studies.[43] Sasikumar and Way asserted that, "democracy… does not promote nuclear restraint."[44] Correspondingly, althoughwith a focus on the Middle East and East Asia, Solingen argues that regime type does not elucidate variations in nuclear proliferation.[45]

Nevertheless, other prominent scholars are dubious about the conclusion of these scholars because they maintain that the definition of regime types is not conceptualized aptly. There is, in other words, considerable dissimilarity of institutions among both autocratic regimes and democratic governments, which needs to be clarified.

Hence, the growing literature on the politics of authoritarianism has disclosed immense variation, in respect to, the domestic institutional structure of dictatorships, which includes nuclear proliferation. Christopher Way argues that we need to move beyond the Polity score's (scale) concentrating on dictatorship/democracy distinction in order to attain a deeper knowledge of the potential relationship between domestic politics/regime type and nuclear policy. Further, Way asserts that in addition to environmental, economic and technical factors, political factors play an important role in under covering the "likelihood, extent, and dynamics of the nuclear energy revival."[46]

[43] Kurt M. Campbell, Robert J. Einhorn, and Mitchell Reiss, The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices, Brookings Institution Press, 2004.

[44] Karthika Sasikumar and Christopher Way, "Testing Theories of Nuclear Proliferation: The Case of South Asia," in Inside Nuclear South Asia, Ed. Scott D. Sagan, Stanford, CA: Stanford Security Studies, 2009.

[45] Etel Solingen, Nuclear Logics: Contrasting Paths in East Asia & the Middle East, Princeton University Press, Princeton, NJ: 2007.

[46] Christopher Way, "The Politics of Nuclear Renaissance," in The Nuclear Renaissance and International Security, Ed. Adam N. Stulberg and Matthew Fuhrmann. Stanford University Press, 2013.

One of the most significant ways that authoritarian regimes differ from democracies is the competence of domestic institutions to limit or constrain individual leaders' executive powers. Barbara Geddes points out to specific type of authoritarian regime, whom is mostly referred to as personalistic, despotic, or sultanistic, where the leader holds control over government decision-making. In personalistic regimes, institutions such as the political parties and military have insignificant power because solely one individual controls the whole state's executive powers and thus state structure.[47] These leaders have total control and are unrestricted in the policy decision-making process, which is a concept similar to the idea of neopatrimonialism in that personalist regime. These regimes may have also got well-developed bureaucracies, but solely if the regime is controlled and commanded by a single individual.[48] These leaders' motives are much different than other leaders.

Psychological analysis of tyrant leaders discloses the fact that "the types of leaders who become personalistic in nature are often incredibly narcissistic with splendid ambitions."[49] Therefore, Christopher Way maintains that personalist regimes are more likely to have perceptible patterns of nuclear technology policy than other autocratic regimes.

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[47] Barbara Geddes, Paradigms and sand castles!: theory building and research design in comparative politics, (Ann Arbor: University of Michigan Press, 2003.)

[48] Alexander H. Montgomery, "Stop Helping Me: When Nuclear Assistance Impedes Nuclear Programs," in Nuclear Renaissance and International Security Workshop, February 2010.

[49] Betty Glad, "Why tyrants go too far: Malignant narcissism and absolute power," Political Psychology 23 (2002), pp. 1-2.

Prestige is interlinked to the pursuit of nuclear energy as a motive. Personalist leaders are motivated by status objectives and the aspiration for national autonomy.[50] Additionally, they are in need of validating their "magnificent self-perceptions" by "largescale technological projects".[51] Hence, such regimes may indeed advance nuclear technology. Nevertheless, personalist regimes tend to eviscerate institutions that promote alternative sources of power. Alexander Montgomery contends that these regimes may be "unbelievably incompetent" and "inefficient" in their endeavor to pursue large-scale technological projects. Subsequently, even though personalist regimes do have interest in developing nuclear programs, they are mostly impotent of managing such projects efficiently. Way and Week maintain that personalist dictatorships specifically more likely to perceive nuclear weapons as an appealing alternative to provide regime security. In addition, they face fewer limitation and constraints in pursuing this strategy than leaders in other types of regimes (both non-personalist authoritarian regimes and democracies).[52]

The realist models and the domestic politics model have been used to explain why two successive Turkish governments have both maintained a nuclear hedging strategy, and effectively, kept a nuclear option open. These models, however, are insufficient and do not adequately explain the trajectory of Turkish nuclear decision-making. This thesis does not seek to replace realist or liberal theories, but to supplement them. In

[50] See Hymans, 2006
[51] Jerrold Post, "Current Concepts of the Narcissistic Personality: Implications for Political Psychology," Political Psychology 14 (1993), pp. 99-121.
[52] Christopher Way and Jessica Weeks, "Making it Personal: Regime Type and Nuclear Proliferation," July 2012.

neorealist explanations, structure only produces broad outcomes, leaving room for variations in specific choices among a range of possibilities.[53]

Additionally, liberal/neoliberal theories underline the causal role of domestic politics and the specific configuration variables relevant to each outcome;[54] yet, these theories fail to explain policy continuities when there are changes in the configuration of domestic politics.[55] Thus, in order to analyze Turkey's nuclear policy decision making, it is necessary to use an intermediate structure that takes changing internal and external factors into account. The strategic culture of a state is a critical starting point for understanding its potential actions and decisions because it is "a structure of beliefs and practices crystallized over time, narrowing the range of choices.

Dating back to the 1970s, the notion of strategic culture is not a new one. The term "strategic culture" was originally coined by Jack Snyder, and was used in the context of assessing Soviet nuclear strategy during the peak of the Cold War. The concept was triggered as a response to the U.S.' failure to predict Soviet actions, and the introduction of the term was part of the reaction seen in the late 1970s to counter the primacy of game theory and rational actor models in strategic studies. Several scholars concluded that each individual country had its own unique way of interpreting, analyzing, and reacting to international events. This brought the question of a

[53] Kenneth N. Waltz, *Theory of International Politics,* (MA: Addison-Wesley, 1979).

[54] Michael W. Doyle, "Liberalism and World Politics Revisited," in Charles W. Kegly, Jr., ed., *Controversies in International Relations Theory: Realism and the Neoliberal Challenge*, New York: St. Martin's, pp. 83-106; Ethan B. Kapstein, "Is Realism Dead? The Domestic Sources of International Politics," *International Organization* 49, Vol.4, (1995), pp. 751-754.

[55] John G. Ikenberry, "Institutions, Strategic Restraint, and the Persistence of American Postwar Order," *International Security 19*, Vo. 4, No. 3 (Winter 1998/99), pp. 32-64.

state/national culture back to the forefront and inspired a new wave of literature which focused on the development of a new tool of analysis, notably that of strategic culture. According to Ian Johnston, there have been three generations of strategic culture scholars thus far. Jack Snyder falls into the first-generation category. The concept of strategic culture, as defined by Snyder, is "the sum of ideas, conditioned emotional responses, and patterns of habitual behavior that members of a national strategic community share with regard to nuclear strategy."[56] Iain Johnston also notes that strategic culture is "an ideational milieu which limits behavior choices." He continues by stating that this milieu is comprised of "shared assumption and decision rules that impose a degree of order on individual and group conceptions of their relationship to their social, organizational or political environment."[57]

Colin S. Gray was another first-generation scholar with similar ideas. In his piece, *Nuclear Strategy and National Style*, Gray defines strategic culture as "referring to modes of thought and action with respect to force, which derives from perception of the national historical experience, from aspirations for responsible behavior in national terms."[58] Gray's argument is that there are distinctive national styles in nuclear politics, based on national history and culture, and that the United States consistently misinterprets the U.S.S.R. One of the primary ideas behind the concept of strategic culture was to explain ideas and actions that seemed to be in conflict with what would be considered rational.

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[56] Jack L. Snyder, *The Soviet Strategic Culture: Implications for Nuclear Options*, (Santa Monica, California: Rand Corporation, 1977.)

[57] Ian Johnston, "Thinking about Strategic Culture," *International Security* Vo. 19, No. 4 (1995), p. 45.

[58] Colin S. Gray, *Nuclear Strategy and National Style* (Lanham, MD: Hamilton, 1986.)

Thus, as far as strategic culture scholars are concerned, there is no universal model of rationality. In other words, what is rational for one state can be irrational for another. Proponents of the strategic culture model argue that it is the history and experiences of each state that determine the state's political decision-making. Specifically, "different states have different predominant strategic preferences that are rooted in the early or formative experiences of the state, and are influenced to some degree, by the philosophical, political, cultural, and cognitive characteristics of the state and its elites."[59] Based on similar ideas, Ken Booth wrote a book titled Strategy and Ethnocentrism, in which he uses historical examples in an effort to prove that culture can have certain falsified effects in the study and practice of strategy. Booth argues that, as a result, there are adverse impacts when it comes to IR analysis.[60]

Throughout the 1980s and 1990s, the study of strategic culture went beyond its original nuclear field of study to examine many other security related issues. It also distinguished itself by raising questions about the relationship between strategic culture and behavior. The strategic culture model was greatly enhanced by scholars such as Kerry Longhurst who sought to utilize strategic culture as an analytical tool. As Johnston notes, the second generation of strategic culture literature "started from the premise that there is a vast difference between what leaders think or say they are doing and the deeper motives for what in fact they do."[61] Moreover, the study of strategic culture can also be used to assess the influence of deep-rooted values and beliefs as it relates to decision-making in security matters more broadly. According to

[59] See Johnston, p. 36.

[60] Ken Booth, *Strategy and Ethnocentrism* (New York: Holmes & Meier, 1979.)

[61] Johnston, p. 39.

Longhurst, "the logic of strategic culture then, resides in the central belief that collective ideas and values about the use of force are important constitutive factors in the design and execution of states' security policies."[62] In his later works, Colin Gray explains strategic culture as "the persisting (though not eternal) socially transmitted ideas, attitudes, traditions, habits of mind, and preferred methods of operation that are more or less specific to a particularly geographically based security community that has had a necessarily unique historical experience."[63]

Moving beyond realist and liberal theories of international relations, Peter J. Katzenstein offers a sociological perspective on the politics of national security. In his book *The Culture of National Security,* Katzenstein argues that state security interests are defined by actors. These actors, he argues, react to cultural factors.[64] The book focuses on two understudied determinants of national security policy: First, the cultural-institutional context of policy; and second, the constructed identity of states, governments, and other political actors. Katzenstein, along with Jepperson and Wendt, contend that the security environments in which states are embedded are in important part cultural and institutional, rather than just material. Moreover, cultural environments impact not only the incentives for different forms of state behavior but also the basic character of states, that is, state "identity."[65] This challenges the idea, in neorealist and neoliberal theory, that there are absolute characteristics of states that are

[62] Ibid.

[63] Colin S. Gray, "Strategic Culture as Context: The First Generation of Theory Strikes Back," *Review of International Studies (*1999), pp. 49–69.

[64] Peter J. Katzenstein, *The Culture of National Security: Norms and Identity in World Politics* (New York:Columbia UP, 1996).

[65] Ronald Jepperson, Alexander Wendt, and Peter Katzenstein, "Norms, Identity, and Culture in National Security," in *The Culture of National Security: Norms and Identity in World Politics*, Ed. Peter J. Katzenstein (New York: Columbia UP, 1996).

exogenous to their environment, although they do not completely renounce the realist model. More recently, realism has expanded to consider social and cultural factors in association with security policy. Nonetheless, the authors favor a richer view that draws on concepts from sociology and cultural studies such as norms and identity.

The foundations of strategic culture lie in the belief that collective values and beliefs about use of force, which is a constitutive factor in the implementation of states' security policies. Strategic culture advocates maintain that at states' region or security alliance lie an array of common beliefs and shared values relating to the use of force. Alan Macmillan argues that, "the decision-making process in matters of defense is not an abstract construct based purely in the present moment but is, rather, steeped in the beliefs, biases, traditions and cultural identity of the individual country- all of which feeds into its strategic culture."[66] Experiences of the past gradually contribute to the formation of culture. Ideologies, fears, feelings, ambitions and objectives are the characteristics of each state's strategic culture. Strategic culture is a product of a variety of different circumstances such as history, geography and narratives, which form the collective identity. Further, strategic culture is also a tool to better understand the "reasons, incentives, and rationales for acquiring, proliferating, and employing weapons of mass destruction (WMD) by diverse actors under circumstances that differ significantly from those for which previous analytical constructs now seem inadequate or irrelevant."[67]

[66] Alan Macmillan, "Strategic Culture and National Ways in Warfare: The British Case," *RUSI Journal* Vol. 140, Issue 5 (1995).
[67] Kerry M. Kartchner, "Strategic Culture and WMD Decision Making," in *Strategic Culture and Weapons of Mass Destruction*, Ed. Jeannie L. Johnson, Kerry M. Kartchner, and Jeffrey A. Larsen (New York: Palgrave Macmillan, 2009).

1.2 Methodology

Since 1950s, Turkey has nuclear option on the table, prompting the following research question: Why, despite the different governments in power, has Turkey kept the nuclear option on the table? The thesis will make use of mainstream theories as well as constructivist approach. The realist theories, such as the security model, and liberal theories, such as the domestic politics model, can indeed explain Turkey's nuclear decision-making. These paradigms are significant therefore they will be employed in this study as tools for assessment. Nevertheless, stirred by the scholarly studies, which has been conducted in the discipline of security studies on strategic culture, this thesis will seek to understand and explain development of Turkey's nuclear program through this lens. In sum, strategic culture stresses the domestic sources of security policy in an attempt to identify how the past influence and shapes contemporary policy decisions and behavior. The strategic culture model unlike mainstream approaches, for instance realist or liberal models, focuses on different states as 'a unique entity' with its own identity and history.

Constructivist approaches seek to understand and explain the ways that narratives and historical experiences, transferred through beliefs and values, can indeed have an impact on national interests. Thereby, shape the policy makers' decisions of a region, state or established security institution. The aim of this thesis is twofold: first, to give an account of the continuities and discontinuities of the Turkish nuclear program; and second, to explore the strategic (military) culture model as a framework wherein Turkish nuclear decision-making may be analyzed.

Research Question: *Why Turkey kept the nuclear option on the table for so many years?*

The independent variables represent causes or inputs, i.e. potential reasons for the nuclear option. The alternative models explain and test the impact of the independent variables on the dependent variables. Sometimes, independent variables may be included for other reasons, such as for their potential effects. The alternative models analyze how the former depend on the latter. The nuclear program is the dependent variable that represent the output or outcome. An intervening variable (in this case NATO nuclear umbrella) is a variable that explains the relationship between two variables.

The main purpose of this thesis is to analyze, why Turkey kept the nuclear option on the table. In this regard, this study seeks to demonstrate Turkey's intentions in building a nuclear program, if it is primarily for civilian reasons or if there are hidden intentions to develop nuclear military program. In order to demonstrate these intentions, this study searches through existing literature, analysis of Turkey's relations with neighboring countries, traditional allies and different models to clarify whether it intends to develop civilian nuclear capacity for the purpose of having its own energy or whether there is another intention. After reviewing Turkey's nuclear history, tactics, politics, domestic issues and strategic position, this study concludes by emphasizing that it is not possible to state in view of the facts, elements and the decisions that Turkey's nuclear energy program is for military purposes rather than civilian.

1.3 Structure of the Thesis

This study consists of 6 chapters. The following is a brief overview of the chapters provided by this thesis, Chapter 1 is an overview of the thesis. Chapter 2 is a comprehensive history of the Turkish nuclear program and it focuses on the foundation and establishment of Turkey's nuclear program and explores the trajectory of the program. Both chapters offer evidence that Turkey has not preserved a strategy of "nuclear hedging" as Iran, but kept its nuclear weapons option on the table. Chapter 3 provides a summary of three models which are used to understand and examine the trajectory of Turkey's nuclear decision-making and it explores the security model. It explains Turkey's realist motivations taking into consideration both global and regional threats. Based on these assessments, it will explore the validity of the security model for understanding and explaining Turkey's nuclear energy program and its aspirations. Chapter 4 employs the domestic politics model as it is related to the Turkish case. It contends that Turkish governments are personalist leaders. Last but not least, this chapter will give an overview of the internal bureaucratic struggles and the domestic debates. Chapter 5 offers a broad literature review of strategic (military) culture theory as well as its evolution since the 1950s. It ascertains key elements of Turkish strategic (military) culture which can best explain the state's quest for a nuclear program. Chapter 6 overviews the main findings and portrays where the ongoing nuclear energy program may lead in the long-run.

Chapter 2

THE HISTORY OF TURKEY'S NUCLEAR PROGRAM

> Every discovery we have made, even the use of fire to warm our bodies, to cook our food, has also been used as one of the devastating weapons of war to bring destruction to enemies. Every single thing that man has discovered can be used for good or for evil depending upon the purpose of man. This would seem to imply that man indeed has to look within himself before he can predict with any certainty, with any possibility of accuracy whatsoever, before he can determine what will be the final results of a great invention such as the discovery of nuclear fission and fusion (President Dwight D. Eisenhower Speech for Atoms for Peace-July 28, 1955).

The United States dropped the World's first atomic bomb over the city of Hiroshima on August 6th, 1945. The United States government decided to use the atomic bomb in a bid to bring a quick end to the Second World War. However, the World has completely changed after this decision. The consequences of the explosion of this first nuclear bomb culminated into the United Nations General Assembly's call for the complete elimination of nuclear weapons, and the setting up of a Commission on January 24th, 1946 to deal with the problem of the discovery and use of the atomic bomb. Notwithstanding the recommendations by the Commission, this did not stop the Soviet Union from testing its own first nuclear bomb "First-Lightning" in Kazakhstan on the 29th of August 1949, thus becoming the second nuclear nation.[68] This clearly brought an end to the United States' monopoly of nuclear weaponry and hence,

[68] Nuclear Weapons Timeline, Ican. (Accessed on: 2 July 2016) Available at: http://www.icanw.org/the-facts/the-nuclear-age/

ushered in the Cold War. The focus of this war was principally on the nuclear arms race between two powerful countries; the United States and the Soviet Union and later the United Kingdom in 1952 as well as France with its everlasting desire to develop nuclear bombs.[69]

By the 1950s, Eisenhower, the President of the United States, delivered his famous speech on 'Atoms for Peace', which he intended would bring a solution to the nuclear atomic dilemma. His intention was to seek a means through which this remarkable invention would benefit mankind rather than bring unparalleled destruction to humanity. In fact, not only the United States, but the rest of the world acknowledged the significant capacity of nuclear energy in contributing to human prosperity. Hence, the reason many nations were passionately seeking to operate nuclear energy for peaceful purposes. Nevertheless, nuclear power was not only limited to usage for peaceful energy, but also for militaristic purposes. According to physicist Keith Barnham, 10 kgs of plutonium was enough to make lighter nuclear weapons for a year.[70] Additionally, Highly Enriched Uranium (HEU), uranium that could be enriched to increase U-235 isotope over 2 % was at a level capable of producing nuclear weapons. As Also, Low Enriched Uranium (LEU) in spent-fuel could be used to produce nuclear explosives.[71] Unfortunately, this was and still is the root of the problem, when nations possess the material and technology, plutonium can be chemically separated, and can be used to make nuclear bombs. Thus, neither the United

[69] "The Cold War," Atom Central. (Accessed on 2 July 2016) Available at: http://www.atomcentral.com/the-cold-war.aspx

[70] Jha Alok, "How do you make a nuclear bomb?" The Guardian, Thursday 19 June 2003. Available at:https://www.theguardian.com/science/2003/jun/19/thisweeksciencequestions.weaponstechnology

[71] NTI, "Civilian HEU Reduction and Elimination Resource Collection," March25, 2016. Available at: http://www.nti.org/analysis/reports/civilian-heu-reduction-and-elimination/

States nor the International Community could afford to let states seek and obtain the technology and materials necessary to weaponize nuclear technology; or rather they sought to prevent other states from acquiring this nuclear technology in a bid to lessen the security dilemma which already existed. Meanwhile, there was growing consensus within the United States of America and other nuclear states with regards to the benefits of peaceful nuclear technology and its feasible contribution toward the production of energy. Despite the benefits associated to nuclear technology in the energy field, the militaristic and destructive elements of the atom could not be disregarded. Hence, the International Community had to ensure that the obtainment and usage of such nuclear materials be done under mandatory and strict security conditions and arrangements.

It was thus necessary to come up with a new policy which would prevent nuclear proliferation. This new policy would enable United States to effectively control the spread of the nuclear technology and the reprocessing procedures of plutonium and uranium[72]. In this light, and to support the growth of the 'atom for peace initiative', the International Atomic Energy Agency (IAEA) was established in 1957. The Soviet Union also joined the negotiations along with twelve other states to spread the IAEA's objective which was to promote the peaceful use of nuclear energy and to ensure that it will not be used for military purposes.[73]

[72] Gerald R. Ford, *Public Papers of the President of United States-Gerald R. Ford* (Washington, the Office of the Federal Register National Archives and Records Service General Services Administration, Book III 1976-77):2763-2778. Available at: http://heinonline.org/HOL/Page?handle=hein.presidents/ppp076003&div=337&start_page=2763&collection=presidents&set_as_cursor=0&men_tab=srchresults

[73] Fischer David, "History of The International Atomic Energy Agency, The First Forty Years," IAEA in Austria, September 1997.

The IAEA seeks to bring common objectives that will be accepted by all states to strengthen the commitment of the nations of the world to the goal of nonproliferation by creating an international sustainable effective system that prevents any nuclear proliferation. With the establishment of the IAEA and the implementation of the 'Atoms for Peace Program', the United States target was to develop an entire non-proliferation strategy, by building internationally storage regimes to keep plutonium under the IAEA's control. The regime aimed at empowering world confidence that the excess plutonium and spent fuel would be stored safely.

The 'Atoms for Peace' program provided the main pillars for Turkey to access such nuclear technology and to create its own nuclear facilities. After Eisenhower's 'Atoms for Peace' initiative speech at the Geneva Conference, Turkey started considering the development of peaceful nuclear energy. In the mid 1950's, Turkey's dependency on foreign energy sources reached an alarming 57%. To redress this, Turkey therefore sought and turned to the exploration of atomic energy in a bid to ease its dependency on foreign energy import. This culminated into the signing of the World's first Atom for Peace nuclear cooperation for peaceful purposes between the United States and the Republic of Turkey under the Atomic Energy Act (AEA/54) in 1955.[74] In this same spirit, the Republic of Turkey established the Turkish Atomic Energy Commission (TAEC) under the control of the Prime Ministry in order to coordinate efforts to build nuclear research and to issue licenses for nuclear power plants in 1956.[75] A 1 megawatt research reactor and training center was established in Küçük Çekmece in 1962 with

[74] Stein Aeron, "Turkey's Nuclear History Holds Lesson for the Future," *The Nonprliferation Review* (2013): 1-4.

[75]Kibaroglu Mustafa, "Turkey's Quest for Peaceful Nuclear Power" *the Nonproliferation Review* (1997): 33-44.

the name; Çekmece Nuclear Research and Training Centre (ÇNAEM). A year later, the Ministry of Energy and Natural Resources was founded. Then in 1966, the Ankara Nuclear Research and Training Center (ANRTC) were established in the capital, to carry out more research on the use of nuclear energy and technology. Turkey sought more knowledge in an attempt to enhance its nuclear technology, and hence use this nuclear technology to support in the production of electricity for the country.[76]

In 1967, feasibility studies began for the construction of a nuclear power plant; the plan was to build a 300- 400 megawatt of electrical output (MWe), and a pressurized heavy water reactor (PHWR) to go online by 1977[77]. With the beginning of the feasibility studies in the field of nuclear energy, Turkey's natural uranium reserves were also brought up to date in the early 1980s, since uranium has a very significant role in the production of nuclear weapons and energy.

Turkey became party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and openly signed it on the 29th of January, 1969, and later, ratified it on April 17, 1980. It's long standing alliance with NATO since 1952, as well as its strong will against the proliferation of Weapons of Mass Destruction (WMD), and its commitment to the establishment of a nuclear free zone made Turkey sign the NPT.[78] Signing the NPT clearly meant an agreement on the abandonment of its desires to pursue nuclear material for militaristic purposes. Notwithstanding, Turkey gained easy access to

[76] Turkish Atomic Energy Authority, History, Monday, 4 October, 2010. Available at: http://taek.gov.tr/en/institutional/history.html

[77]Ulgen Sinan, Perkovich George. "Turkey's Nuclear Future" Carnegie Endowment for International Peace, 2015.

[78] Ulgen Sinan, The Security Dimensions of Turkey's Nuclear Program: Nuclear Diplomacy and Non Proliferation Policies, for more information: http://www.edam.org.tr/edamnukleer/section5.pdf

peaceful nuclear energy. However, it is also important to indicate that according to the NPT Treaty, Article X clearly specified;

> Each party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty…It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interest.[79]

Access to peaceful nuclear energy was the policy of America within the 'Atoms for Peace program'. However, the Cuban Missile Crisis in the 1960s, made the Kennedy administration reconsider the Eisenhower strategy on the use of nuclear weapons. In meantime, and as part of its commitment to NATO, Turkey had been hosting American nuclear bombs, since the February of 1959, known as the 'Jupiter missiles'.

The Turkish fear of a Soviet attack on its territory was calmed by the presence of the 'Jupiter missiles' which stood as a symbol of the United States' willingness to use nuclear tactical weapons against any potential Soviet invasion in Turkey. Thus, the forward deployment of this missile system was crucial for Turkey's defense against the Soviet Union.[80] The deployment of the Jupiter Missiles in Turkey was of vital importance in cases of emergency. Thus, in the agreement on the placement of the nuclear weapons in the Mediterranean, Ankara made three demands;

1) They wanted a missile key,

[79] Non-Proliferation of Nuclear Weapons (NPT) 2-27 May 2015, New York. For more information; http://www.un.org/en/conf/npt/2005/npttreaty.html

[80]Turkey's Nuclear Missiles: An Important Player in the Cuban Missile Crises, *Word Press*, November 4, 2012. Available at: https: //turkeywonk.wordpress.com/2012/11/04/turkeys-nuclear-missiles-an-important-player-in-the-cuban-missile-crisis/

> 2) They wanted the agreement to be completed before Foreign Minister Zorlu visited the UN General Assembly on 19 September, and
>
> 3) And they wanted the funding for the missiles to come from the U.S. military assistance program.[81]

Ankara's demands were clear and highly ambitious, especially regarding possession a missile key which gave Turkey the authority to be able to launch the missiles in cases of emergencies. Not forgetting the fact that they had to be trained by American military personnel as well.

Turkish interest on this issue was clearly visible in 1965, when it was a member of the Working Group on Nuclear Planning; when a Turkish representative is known to have proposed that advance authority be given to NATO commanders to use tactical nuclear weapons by passing political consultation in an emergency.[82]

In the beginning of the 1970s, Turkey made a second attempt to carry out comprehensive feasibility, site selection and bid specification studies for 600 MWe nuclear power plant. Later on, TAEC issued a license for the Akkuyu site selected by the Turkish Electricity Authority (TEK) with the consultation of one French, and three Swiss firms for the construction of the second nuclear power plant and fuel service. Then, in 1977 two Swedish firms Asea-Atom and State Laval started financing the investment.[83] With such an agreement with the French and Swiss firms, TAEC aimed

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[81] Stein Aaron, "Turkey and the Dual-Key Arrangement: Ankara's Interest in using Nuclear Weapons," Word Press, December 5, 2013. Available at: https://turkeywonk.wordpress.com/2013/12/05/turkey-and-the-dual-key-arrangement-ankaras-interest-in-using-nuclear-weapons/

[82]Campbell Kurt M., Einhorn Robert J., Reiss Mitchell B., "The Nuclear Tipping Point" Brookings Institution Press, 2005, p. 149.

[83]Kibaroglu Mustafa, "Turkey's Quest For Peaceful Nuclear Power" the Nonproliferation Review/Spring-Summer 1997

to accomplish and to carry out some primary functions such as; to generate electricity from nuclear power plants for the national grid; extensive atomic research; and the training of specialist at all levels on nuclear science and technology, in order to develop alternative sources of this energy.

Having said that, Turkey started to operate the 250 kilowatts thermal Triga Mark II research reactor, and in the late 70s and beginning of the 1980's the TR-2 research reactor was operated by a five MWe pool-type research reactor. At the same time, Turkey had also selected the site for the second nuclear power plant by the NPP division of TEK. One of the primary challenges since the beginning of the acquirement of the nuclear technology by Turkey was a lack of expertise and personnel in the field of nuclear science and the necessary technology associated to this matter. The early 80's were also crucial for Turkey's strong for the development of strong bonds with Pakistan which had begun since the 1950s. On the other hand, the United States was concerned about the Turkish-Pakistan relationship, fearing that the main aim of this relationship was the transportation of dual-purpose uranium enrichment technology from Turkey to Pakistan.[84] It is worthy of noting that the majority of the nuclear materials smuggled from the West to Pakistan continued to move through Turkey in 1984.[85] In fact, Turkey and Pakistan were members to the Regional Cooperation for Development (RCD) which strengthened their ties within the Muslim Brotherhood, as well as the abolishment of visa requirements between them. In this same light, the two countries began searching for avenues for expanding their trading relations. Therefore, "the need to institutionalize Pakistan-Turkish trade was fulfilled

[84]Campbell Kurt M., Einhorn Robert J., Reiss Mitchell B., "The Nuclear Tipping Point" Brookings Institution Press, 2005, p. 149.
[85]Ibid. p. 61.

with the establishment of a Pakistan-Turkish Joint Commission for Economic and Technical Cooperation in the November of 1975."[86] One of the significant reasons for this alliance was that Turkey was dependent on other countries for imports, and so the deal with Pakistan was very important, and by the late 1970s, and it could be clearly seen that Pakistani importers were keen on buying "chemicals"[87] from Turkey and Turkey was keen on importing "entirely new items of Pakistan, export fuel oil."[88]

This drastic increase in trade between these two Muslim Brotherhood countries brought high concerns and suspicions in the United States and NATO especially with regards to the transfer of nuclear material and technology. As a result, Washington threatened Turkey with a seizure of economic aid, while NATO blocked Pakistan's uranium enrichment program, and the United States applied military and economic sanctions on Pakistan, with the aim of stopping the development of its nuclear weaponry system. With all the threats on Turkey and the sanctions imposed on Pakistan's enrichment program, "President Ziaul-Haq reportedly opened talks with Turkey, taking advantage of his brotherhood with his Turkish counterpart Kenan Evren."[89] Evren on the other hand responded that "there had been nuclear enrichment exports from Turkey to Pakistan,"[90] although, later these claims were said to be false by the Council of Ministers. At the same time, there were allegations by the Greeks that Turkey was expected to send inverter materials for a nuclear bomb and in return,

[86]Ahmad Naved, Pakistan-Turkey Relations, Pakistan Horizon, Vol. 34. No.1. The Inter-Relation of Muslim States and Pakistan (First Quarter 1981), pp. 105-128
[87]Ibid. p.123.
[88]Ibid. p.124.
[89]Ibid. Mus. Kib.

[90]Ibid. Nuclear Tip.

Pakistan was to reciprocate by sharing the nuclear bomb technology with Turkey.[91] Furthermore, it is also claimed that Pakistan provided advanced training for Turkish scientists in Pakistani nuclear facility sites.[92]

The impact of the brotherhood on the two countries, and the continuous attempts by the International Community in preventing Turkey's acquisition of nuclear technology, was clearly visible especially in the case of Turkey. As the government step up its efforts toward obtaining nuclear technology. Firstly, in 1982, TAEC which had been established to build nuclear research and training centers was replaced and reorganized with the creation of the Turkish Atomic Energy Authority (TAEK)[93] under the auspices of the prime ministry. Moreover, Ankara invited three more companies for the construction of three or four nuclear power plants in the region. Turkey sent intent letters to the West German Siemens-Kraftwerk Union for the Construction of a 990MWe pressurized water reactor in Akkuyu. For the 655 MWeCandu reactor, Turkey wanted to work with the Atomic Energy of Canada Limited (AECL), and for the operation of the last two boiling reactors in Inceburun, Sinop, Tukey intended to work with General Electric (GE) in the United States. Within the scope of these attempts, Ankara's and President Ozal's preference strategically was on building nuclear power plants, preferably Build-Operate-Transfer (BOT) financing models. The reason why Turkey preferred this model at that time was that, with the BOT type of nuclear facilities, the contractor company pays for the construction, operating costs

[91]The National Security Archive, "the U.S.-Pakistan Nuclear Relaions." US Department of State, 21 January 2015. Available at:http: //nsarchive.gwu.edu/nukevault/ebb531-U.S.-Pakistan-Nuclear-Relations,-1984-1985/documents/Doc%208A%2010-3-84%20call%20from%20Hersh.pdf

[92] Ibid. Nuclear Tipping Point

[93]NTI, "Turkish Atomic Energy Authority," updated March 1, 2011. Available at: http://www.nti.org/learn/facilities/490/

of the nuclear arsenal, and operates the facility for roughly 15 years. In this regard, Turkey was going to recoup its expenses as well as gain considerable profit, when the nuclear facility was eventually transferred to the host government. For Turkey, the 1980s was also a period for focusing on strengthening capacity at the institutional level in the nuclear field, as well as ratification and signed international agreements such as; the ratification of the Non-Proliferation of Nuclear Weapons Treaty (NPT) on 17 April 1980, which was signed in 1969,[94] as well as the IAEA safeguards. Turkey also became a member of the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD).

The fears of the United States and the International Community on Turkey's potential to develop nuclear power and usage of this power and technology to acquire nuclear proliferation, as Pakistan had done,[95] was exacerbated in 1989, when Ghulam Sarwar Cheema, Pakistani federal minister of defense was interviewed in Istanbul and he noted:

> The accumulated knowledge in one country should be shared by the other between Turkey and Pakistan, Cheema said: I am afraid that everyone knows what the other does in this world... The Western countries have tried to prevent us from moving together and they will continue to do so in the future... Regardless of the strenuous effort made by the Christian world, fraternal relations between Turkey and Pakistan have increased. It is as if we have integrated to become a single whole (Campbell, Einhorn, Reiss-p.163).

As a result of these allegations and suspicions about the Turkey-Pakistan relationship, Canada withdrew its support to Turkey in the quest for its obtainment of nuclear

[94] United Nations Office for Disarmament Affairs (UNODA), "Treaty on the Non-Proliferation of Nuclear Weapons" United Nations, 2016. Available at: http://disarmament.un.org/treaties/t/npt

[95] Jewell Jessica, Ates Ahmet Seyithan, "Introducing nuclear power in Turkey: A historic state and future prospects," *Energy Research & Social Science* 10 (2015): 273-282.

power. West German also withdrew from its agreement. To make matters worse, the Chernobyl disaster of 1986, also gave rise to domestic opposition against the nuclear program in Turkey. According to the Daily Sabah Turkey and the Anadolu Agency, government officials such as Cahit Aral who was the minister of industry and trade, as well as the previous environment minister Dogan Akyurek, there had been no radiation in tea as some oppositions had claimed. TAEA (TAEK) and the Parliaments Cancer Research Committee had also announced that the radiation in the tea and nuts was harmless.[96] However, the Turkish Chambers of Physicians established a report, specifying that 47.9% of the deaths in Black Sea Region, especially in Artvin and Rize were as a result of cancer. Also, Dr. Kayahan Pala who worked in a village near Rize between 1988 to1990 observed a rise in abnormal births within that time period. Yet, Northern Turkish residents were encouraged to carry on consuming the tea, nuts and fish in the black sea by government officials.[97] These political factors along with financial disagreements with contractor companies As well as the International Community's suspicions on the Turkey-Pakistan Islamic brotherhood relationship spelled the death of the Turkish nuclear program.

Notwithstanding, the desire to continue developing its nuclear power plants for peaceful purposes especially that of providing electricity and power kept Turkey's hope of nuclear technology alive, particularly, as the president of the Turkish Atomic Energy Commission Mr. Ergin reported; "nuclear power brings prestige to the

[96] Daily Sabah Turkey, "Chernobyl Effects in Turkey 28 years later," AA, April 27, 2014. Available at: http://www.dailysabah.com/nation/2014/04/27/chernobyl-effects-in-turkey-28-years-later

[97] Egrikavuk Isil, "Chernobyl Still Haunts Turkey's Black Sea Coast," Hurriyet Daily News, March 18, 2011. Available at: http://www.hurriyetdailynews.com/default.aspx?pageid=438&n=the-haunting-memories-of-chernobyl-2011-03-18

nation,"[98] and with this nuclear technology Turkey was believed to be an honorable and strong country, because nuclear technology consists of strategic power and economic components.[99]

With the Chernobyl disaster in 1986 and following the collapse of negotiations with Canada (CANDU), West German (Siemens Kraftwerk Union) and General Electric (GE) of the United States, Turkey turned its search for nuclear technology to Argentina, and the two countries signed a fifteen-year nuclear cooperation agreement on May 3, 1988, which was later recognized by the Turkish Parliament in 1992. According to the agreement, Ankara was interested in Argentinian designs of 380 MWe Argos PWR by Empresa Nuclear Argetina de Centrales and 25 MWe CAREM-25 small reactors.[100] Turkey at this time hoped to transfer Argentina's knowledge of nuclear technology to Turkey and duplicate the Argentinean drive for nuclear fuel cycle independence, by building up one CAREM-25 first in Argentina in 1991 and then in Turkey a year later. Turkey would take the lead in financing the plants while Argentina would provide the related technology to frame the small nuclear reactor (CAREM-25). Turkish Prime Minister Turgut Ozal and Argentinean President Carlos Menem negotiated the deal in order to operate CAREM-25. Thereafter, two Turkish firms Sezai Turkes-Fevzi and Turkish Electric Authority (TEK) and Argentinean firms Commission Nacional de Energia Atomica (CNEA), and Investigaciones Aplicadas(INVAP) were put in charge of the programme.

[98] Akcay B., "The Case of Nuclear Energy in Turkey: From Chernobyl to Akkuyu Nuclear Power Plant," *Energy Sources* 4 (2009): 347-355.
[99] Ibid. p.351
[100] Martin H. David, "The Candu Syndrome: Canada's Bid to Export Nuclear Reactors to Turkey," *Campaign for Nuclear Phaseout* (September 1997): 1-14

it is rather confusing as to why Turkey was interested in operating such a low power reactor which could provide just a limited amount of nuclear energy. This mystery was revealed however when former director of TAEA Prof. Yalcin Sanalan described the reactor as; "too small for electricity generation and too big for research or training, however, very suitable for plutonium production,"[101]. This therefore, this was an indication of Turkey's desire for nuclear weapons. As a result of this, Turkey focus for the International Community and the United States as was noted in Jewell and Ates's article; "as Turkey has not got any experience from its past failures in pursuing nuclear power, and has not taken a step further to alleviate suspense of Western nuclear supplier states."[102]

It was no surprise therefore that concerns about Turkey's potential involvement in nuclear weapons proliferation, made the United States, the Soviet Union and Germany to diplomatically impose pressure on Turkey to stop its efforts toward obtaining the CAREM-25. As a result of the international pressure, as well as financial difficulties and a lack of human resource capabilities to run the program, the agreement between the two countries was terminated.

It is worthy of noting that it had been expected that if the cooperation in the CAREM-25 programme had gone according to plan, research and developments on the 380 Mwe Argos PWR would have followed.[103] Also, former Turkish Prime Minister,, Turgut Ozal had been hoping that engineers, scientists and companies in Turkey would fully

[101] Martin H. David, The Candu Syndrome: Canada's Bid to Export Nuclear Reactors to Turkey, September 1997.
[102] Jewell Jessica, Ates Ahmet Seyithan, Introducing nuclear power in Turkey: A historic state and future prospects.
[103] Perkovich, Ulgen Turkey's Nuclear Future, 2015 Carnegie Endowment for International Peace.

join in construction of the Argentine reactor.[104] The aim had been that Turkey was finally going to obtain the necessary knowledge and expertise nuclear science which was a must quality for being a strong state, as had been stated by the leader of the Turkish Islamist Movement, Necmettin Erbakan stated.[105]

Later in 1992, a report from the Ministry of Energy and Natural Resources was submitted to the government with specifications on high growths in energy demand (an increase in energy consumption of up to 8% since 1975), while also strongly suggesting the installment of new energy sources before 2010. With this drastic increase in energy demands, and the obvious inability of private owned companies in meeting up with these high energy demands, and in order to stall high public deficit and debt, the Turkish Government privatized TEK.

In 1994, TEK was divided into two corporatized entities; the Turkish Electricity Distribution Company (TEDAŞ) and the Turkish Electricity Generation and Transmission Company (TEAS).[106] In 1996, Turkey also made several attempts to develop nuclear reactors in a bid to meet up with its annual energy consumption growth rate of 8% since 1975, especially as nuclear energy was seen as the solution to the high energy consumption problem in Turkey. For this reason, Turkey sought to facilitate two 669.5 MW and four 665.5 MW nuclear reactors both built by CANDU PHRW from AECL/Canada, and another nuclear reactor from a French based firm for 1482 MW PWRs, as well as other attempt to build 1228 MW nuclear reactors with help from the United States and Mitsubishi/Japan in the Akkuyu region. However, none of

[104] Kibaroglu, Ibid.
[105] Bacik Gokhan, Salur Sammas, "Turkey's Nuclear Agenda: Domestic and Regional Implications," *Uluslararasi Iliskiler*, Volume 6, No 24 (Winter 2010): 99-116.
[106] Atiyas Izak, Cetin Tamer, Gulen Gurcan, "Regulatory Reform and Competition in the Turkish Electricity Industry," *Springer New York* (2012): 15-62.

these attempts were fruitful, as from1998 up to 2000, the Turkish Government continuously delayed its decision eight times. Finally, in July of 2000, the Turkish Parliament abandoned the plans due to economic reasons and the financial crisis. Hence, the Nuclear Power Plants program was shut down once more.

With Erdogan coming into power in 2003, Turkey managed to make more headway as of 2010, in terms of nuclear energy capabilities. Under the leadership of the AKP, Turkey strengthened its collaboration with international actors, as the new government signed a civil nuclear cooperation agreement with the United States that entered into force in 2008; another nuclear cooperation agreement was signed with South Korea and Japan in June 2010 and Jordan in 2011.[107] The Turkish Government has also sat around the table with China for two similar agreements. Most importantly, the IAEA handled an Integrated Nuclear Infrastructure Review (INIR) in Turkey to evaluate the country's progress in obtaining the nuclear power program in 2013. Although the report was positive, it put forward a number of recommendations in order to strengthen the national policy on nuclear energy, the regulatory body, and the development of a stable plan for human resource development.[108]

After unflagging interest and motivations for nuclear power, in nearly six decades, Akkuyu was once again opened to a bidding process. However, there was only one bid submitted in 2008 by a consortium of 14 parties. High level talks were conducted with Russia (Vladimir Putin) and two nuclear cooperation agreements were signed in

[107] Perkovich, Ulgeb. Ibid. p.15
[108] World Nuclear Association, "Nuclear Power in Turkey", WNA, May 2016. Available at: http://www.world-nuclear.org/information-library/country-profiles/countries-t-z/turkey.aspx

August 2009, but the deal was later canceled by TETAS for a new tender that would be launched soon.

Finally, on May 12th, 2010, an agreement on cooperation between the Republic of Turkey and the Russian Federation was signed with regards to the construction and the operation of a nuclear power plant in the Akkuyu region.[109] Later this agreement was ratified by Turkish parliament in July, 2015, and as well as in Russia in November of the same year. According to the agreement, Rosatom was compelled to build 4 power units VVER-1200 reactors with 4800MWe capacity, under Build Own Operate (BOO) principles Russian type nuclear power reactors,[110] and with the first two reactors TETAS was assigned to purchase 70%of the electricity, then 30% of the electricity for next two nuclear reactors. The average price was fixed to 12.35 cents per kilowatt-hour without VAT for 15 years. The deal is that after 15 years (ROSATOM) can sell the electricity on the open market and will transfer 20% of its profits to the Turkish Government. Per the agreement the nuclear plants would be built in Turkey, and Russia would finance the project fully to the estimated cost of 18.7 billion dollars. The cost has however gone up to $22-25 billion due to operate A 5000-5600 MWe nuclear power plants in Akkuyu.

Meanwhile, several significant steps and developments have also taken place within Turkey to build a second nuclear power plant in the Black Sea province, Sinop region. The Electricity Generation Company (EUAŞ) signed an agreement with Korea Electric Power Corporation (KEPCO) to prepare a bid to develop the plant with four

[109] According to the Akkuyu Nukleer A.Ş. official website, "Project History" 2011. Available at: http://www.akkunpp.com/project-history-2
[110] According to the Akkuyu Nukleer A.Ş. official website," Akkuyu Nuclear JSC" 2011. Available at: http://www.akkunpp.com/akkuyu-nuclear-jsc

nuclear reactors, but the proposal proved to be short lived, because KEPCO insisted on Ankara's treasury loans and receiving electricity sales from the government, rather than from TETAS.[111]

Hence, the Turkish Government under Erdogan's Presidency turned to Japanese Companies for the Sinop Nuclear Power Plant deal. Toshiba and Tepco both Tokyo Electric Power Companies were involved with proposals to Ankara, for fund and operate four 1.350 Mwe advanced water boiling nuclear reactor units, however talks with Japan were suspended due to the Fukushima disaster. In addition, Turkey continued its nuclear power research throughout 2011-2013, considered an offer from Canada's Candu Energy and signed an agreement with EUAS for a six-month study on building a 3000 Mwe plant in Sinop. In 2013 the agreement was terminated by Turkey.

In May 2013, the government accepted the proposal from a consortium with Japan's Mitsubishi Heavy Industries (MHI) and France's Area Company. Operations were to be conducted by French firm GDF Suez (now Engie) to build BOT type 4 Atmeal Nuclear Reactors to a cost of $22 billion, which will be the first of its kind in Nuclear History.[112] According to the Ministry of Energy and Natural Resources, the total capacity of the Sinop Nuclear Power Plant Project will be 4800MWe and each reactor will produce 1120 Mwe energy and the service life of the reactors will be up to 60

[111] World Nuclear Association, "Nuclear Power in Turkey", WNA, May 2016. Available at: http://www.world-nuclear.org/information-library/country-profiles/countries-t-z/turkey.aspx
[112] According to the Future of Nuclear Power in Emerging Markets: Turkey, July 31, 2013. Available at: http://forumonenergy.com/2013/07/31/the-future-of-nuclear-power-in-emerging-markets-turkey-2/

years[113] An inter-governmental agreement was signed with Japan and then later that same year in October, an official agreement at the prime ministerial level was signed for the project. The Turkish President Erdogan has also approved of the parliament's ratification to build a second nuclear power plant in Turkey.

The Turkish Government has already set an agenda to build a third nuclear power plant, and TAEK has identified Igneada in Kirklareli province on the Black sea as the location for this. This was confirmed by Ankara in October 2015. Additionally, Akcakoca, Ankara and Tekirdag on the west coast of the Marmara Sea are also being considered as possible nuclear sites due to their low seismic risks. In November 2014, EUAŞ signed an agreement with the State Nuclear Power Technology Corporation (SNTPC) of China and the Westinghouse of the United States to begin negotiations to operate and build four more nuclear power units in Turkey.[114] So far, there is no official announcement from the Turkish Government for this third nuclear power plant development nor has any site been specified.

In addition, Turkey has recently restarted its research on uranium. Uranium is needed for nuclear energy productivity. The process of burning uranium which occurs in a nuclear reactor created heat. The heat which is created by splitting the U-235 atoms in uranium is then used to make steam to produce electricity.[115]

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[113] Republic of Turkey Ministry of Energy and Natural Resources, "Nuclear Power Plant Projects in Our Country" Available at: http://www.enerji.gov.tr/en-US/Pages/Nuclear-Power-Plant-Planned-Projects-In-Our-Country

[114] Perkovich, Ulgen, ibid. P.15

[115] World Nuclear Association, "What is Uranium? How Does It Work?"2014 Available at: http://www.world-nuclear.org/information-library/nuclear-fuel-cycle/introduction/what-is-uranium-how-does-it-work.aspx

It should be noted that uranium was first discovered in Turkey in the early 1980s by the Turkish Uranium Division of the Department of Energy, Raw Material and Exploration (MTA). Temrezli was the region, where the first Uranium anomalies were discovered and provided sufficient positive results. Various reports sources from the Government, commercial and private sources have agreed that the uranium resources found in Temrezli are of acceptable quality and reliability for the construction of a power plant.[116] Uranium was also discovered in the Sefaatli province in the mid-1980s, and hence, a uranium project was created there. The Sefaatli project area is nearly km2 and is located in the small village of Deliler. According to URI, the Sefaatli project area has the country's most significant uranium resources outside of the Temrezli project area.[117] Both project activities were undertaken first by Australian based Anatolia Energy Ltd, then in June 2015, Uranium Resources Inc. (URI) took over Anatolia Energy Ltd. Today, the uranium authority is under the TAEA(TAEK) and the Ministry of Energy and Natural Resources. Both sites have been officially licensed for the exploration of the uranium.

One of Turkey's biggest challenges in the nuclear science field is not having sufficient experts in the field of nuclear science and engineering. In order to bring a solution to this dilemma, the Ministry of Energy and Natural Resources announced that Turkey and Russia have arrived at an agreement which would see the educating of Turkish Students at the National Research Nuclear University (Mephi).[118] The aim of the program is to train 600 Turkish students at Bachelor, Specialist and Masters Levels for

[116] Uranium Resources Inc. (URI), "Temrezli Overview" 2015. Available at: http://www.uraniumresources.com/projects/turkey/temrezli
[117] Uranium Resources Inc. (URI), "Sefaatli Project" 2015. Available at: http://www.uraniumresources.com/projects/turkey/sefaatli
[118] Republic of Turkey Ministry of Energy and Natural Resources, "Nuclear Engineering Education in Abroad" available at: http://www.enerji.gov.tr/en-US/Pages/Nuclear-Engineering-Education-in-Abroad

the operation of the Akkuyu NPP in Mersin province. The expected duration for the education and training will total 7 years according to this agreement. The initial training will be under three categories; first year will be learning of the Russian Language, the next four years will focus on "Nuclear power plant, design, operation and engineering, and the last part of the study will be on the job-training at various Russian Nuclear Industries.[119] In line with this plan, 50 students from Turkey were sent to Russia in 2011, and the following year, 75 more were sent to join Russia's nuclear training program. The program will be providing scholarships to students as well as transportation to Russia and back to Ankara and accommodation by the government.[120]

In Turkey, there is only one university that provides an undergraduate degree in nuclear science; this is the Hacettepe University, which established a nuclear engineering department in 1982. In addition to this, other universities such as; the Istanbul Technical University and Ege University offer some nuclear related studies. Turkey even has two nuclear reactors; one under the surveillance of the Istanbul Technical University; and the other one in Kucuk Cekmece, and offers practical trainings to students. It is for these reasons that Turkey agreed with Russia to train Turkish students in nuclear engineering in Russia so that they can return with the necessary theoretical knowledge and practical expertise to work on the Turkish Nuclear Programme.

[119] According to the Akkuyu NGS Elektrik Uretim A.Ş. Website "Education" Available at:http://www.akkunpp.com/education-2

[120] According to the Future of Nuclear Power in Emerging Markets: Turkey, July 31, 2013. Available at: http://forumonenergy.com/2013/07/31/the-future-of-nuclear-power-in-emerging-markets-turkey-2/

In addition to this international collaboration with Russia, Turkey is also a signatory to international technical cooperation agreements with the United States, Germany, Jordan, South Korea, Ukraine and Argentina, as well as with the IAEA in order to develop human resources in the region. In addition to the international collaboration with other countries and entities, TAEK is also in the process of providing study programs with Russia in licensing the process of reactor designs for VVER-1200 nuclear reactor.[121]

The IAEA describes spent fuel as irradiated nuclear fuel totally removed from the nuclear reactor, and radioactive waste as a radioactive material in liquid or solid form, which is not appropriate for further use in nuclear reactors which is under the control of the regulatory framework of the contracted party.[122] Today, there are 440 nuclear reactors in 31 countries with 65 more reactors under construction with over 380,000 Mwe capacities. These nuclear reactors provide over 11% of the world's electricity.[123] It is a known fact worldwide that every nuclear reactor uses nuclear fuel in order to produce electricity, and at the end of this process, spent fuel comes out from the reactor. Existing spent fuel can be reprocessed and up to 25 to 30%of uranium and plutonium which is contained in spent fuel can be retrieved. Once used fuel is removed from the nuclear reactor, it becomes radioactive waste due to the decay of various unstable atoms in the fuel. Some of these atoms are short lived, yet some of the

[121] Banks John, Massy Kevin, Ebinger Charles, "Human Resource Development in New Nuclear Energy States: Case Studies from the Middle East," The Brookings Institution, 1775, Massachusetts Ave., NW, Washington, D.C., 20036,(November 2012)1-39.
[122] International Atomic Energy Agency, "The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, published by IAEA INFCIRC/546, December 24, 1997.
[123] World Nuclear Association, Nuclear Power in the World Today, January 2016 available at: http://www.world-nuclear.org/information-library/current-and-future-generation/nuclear-power-in-the-world-today.aspx

unstable atoms have long lives that threaten the environment and humanity. In this case, there are several ways to store used fuel; water pools, known as "wet storage" or in metal solid structures filled with inert gas or air, known as "dry storage".[124] The reason for storing spent fuel is in a bid to prevent the radioactive elements from polluting the natural environment where people could swallow or inhale. Such storage practices also require institutional controls as "security measures, monitoring and maintenance". Thus, today the IAEA as an institution ensures the application of such security measures to nuclear waste management in order to minimize catastrophe which can be caused by these radioactive materials. To this end, it is important to be in cooperation in enhancing the safety of spent fuel and radioactive waste management, as well as to achieve and to set worldwide high level security and safety measures in managing such materials.[125]

With regards to Turkey's Nuclear Waste Management procedure, Turkey has become a member to international bodies like the Zangger Committee (ZC) in 1999, and the Nuclear Suppliers Group (NSG) for the purposes of exportation and control of nuclear materials and equipment. The permission for the export of nuclear materials, equipment and related technology was adopted in 2000 in Turkey and was later amended in September 2004 by the Radiation Safety Decree. The responsibility for the control of exports and related materials has been given to the Turkish Atomic Energy Authority (TAEA). That is, the TAEA is authorized to have international connections with other states in order to keep and maintain its functions effectively. In the domain of radiation protection, the TAEA has all the legal authority and

[124] Hester R.E., Dorthmunth K.W., Gillespie P.A., Whitaker S.H., "Waste Treatment and Disposal," The Royal Society of Chemistry, Thomas Graham House, Science Park, Cambridge CB4 4WF, 1995.

[125] Ibid. pp.118.

responsibility for the management of the radioactive waste, radiation protection and safe transportation of radioactive materials.[126]

In Turkey, there is only one Radioactive Waste Management Division (RWMD) in the Cekemece Nuclear Research and Training Centre, and this institution is authorized for the collection, storage, transportation and disposal of radioactive waste all over Turkey, under three units known as; Low-Level Radioactive Waste Management Unit (LLRWWMU), High-Level Radioactive Waste Management Unit and Radioactivity Measurement and Analysis Unit. They are responsible for controlling radioactive waste, despite the fact that this institution institute does not have any reprocessing technology. In addition to this, Turkey has regulations under TAEA on nuclear waste, the safe transportation of radioactive materials, and industrial radiography and legislation for the management of waste arising from the use of radioactive materials.[127]

According to the regulation on wastes from the use of radioactive materials, legal authority and decision making will be under TAEA, and as clarified under Article 5 and 6, any licensed official or private person, institution and/or organization who is authorized to use radioactive elements also has the responsibility of disposing of this waste under the given by the TAEA. Under Article 7, there are also specified

[126]Nuclear Energy Agency "Nuclear Legislation in OECD and NEA Countries, Regulatory and Institutional Framework for Nuclear Activities Turkey," OECD 2008. Available at: https://www.oecd-nea.org/law/legislation/turkey.html

[127] Turkish Atomic Energy Authority, Radioactive Waste Management Division. Available at: http://www.taek.gov.tr/en/institutional/affiliates/cekmece-nuclear-research-and-training-center/349-radioactive-waste-management-division.html

limitations. For example, solid, liquid and gas waste cannot be reused nor reprocessed for any other use.[128]

The agreement between the Republic of Turkey and the Russian Federation on the Akkkuyu Nuclear Power Plant holds that the project company (Rosatom) will provide nuclear fuel to the NPP. However, under Article 12,of the agreement states that in the case of Russian-origin nuclear fuel, and depending on the agreement between the contracting parties, the reprocessing procedures may be done in Russia. Furthermore, the cross border transportation of the nuclear fuel and radioactive material will be permitted according to the state's laws and regulations.[129] In this case, it can be asserted that Turkey's intentions on spent fuel and radioactive waste seem to lack transparency, since it does not clearly specify what will be done with such spent fuel management and nuclear radioactive waste.

The concerns regarding nuclear waste were again exacerbated when the IAEA provided a report upon the government's request. The initial report was on Integrated Nuclear Infrastructure Review (INIR) and delivered to the Undersecretary of the Energy Ministry, Metin Kilci and to the TAEA (TAEK), and contained 24 recommendations by the IAEA. However, because of the Turkish State's security concerns (according to Article 20) the report was hid away from the public.[130] On the

[128] TAEA, Regulations on Wastes From The Use of Radioactive Materials. Avaliable at, Official Gazzette Date:2.9.2004, Official Gazette Number: 25571. Available at: http://www.taek.gov.tr/en/belgeler-formlar/documents/Regulations/radiation-safety/
[129] Milletlerarasi Andlaşma, Resmi Gazate, Wednesday 6, 2010. Available at: http://www.resmigazete.gov.tr/eskiler/2010/10/20101006-6.htm

[130] Tanis Tolga, "Turkish Energy Ministry Refuses to Send INT'l Report About Akkuyu Power Plant to Court," Hurriyet Daily News, May 1, 2015. Available at: http://www.hurriyetdailynews.com/turkish-energy-ministry-refuses-to-send-intl-report-about-akkuyu-power-plant-to-court-.aspx?pageID=238&nID=82061&NewsCatID=340

issue of the IAEA's requirements, one of the key factors emphasized on Turkey's transparency to establish "national policy for all kinds of radioactive waste and to identify the responsibilities of a national waste management organization,"[131] with other significant statements that need to be taken into consideration and clarified by the TAEA and the Turkish Government.

In fact, it is not explicitly stated neither in the initial agreement between the Republic of Turkey and Russia nor has any Turkish Ministry made any official announcement regarding question of nuclear waste management. Interestingly enough, the Turkey's minister of Energy, Taner Yildiz is reported by journalists as having said that the state has no obligation to share all the documents with the public or the media. and relatively, unpublished documents do not mean secret in his presence in Kayseri province, and He also confronted Hurriyet's story by openly stating that in the future nuclear waste will be exported to Russia.[132]

2.1 Turkey's Nuclear Program From The Legal and Internal Context

The Republic of Turkey firstly established the Turkish Atomic Energy Commission (TAEC) under the control of the Prime Ministry in order to coordinate efforts to build nuclear research and to issue licenses for nuclear power plants in 1956.[133] In 1960, the construction of Cekmece Nuclear Research and Training Center (CNAEM)

[131] Tanis Tolga, "IAEA secret report reveals Turkey's nuclear duties," Hurriyet Daily News, June 1, 2015. Available at: http://www.hurriyetdailynews.com/iaea-secret-report-reveals-turkeys-nuclear-duties.aspx?pageID=238&nID=83256&NewsCatID=510

[132] Hurriyet, "IAEA's report on Turkey's first nuclear plant no secret, minister says," Hurriyet Daily News, June 1, 2015. Available at: http://www.hurriyetdailynews.com/iaeas-report-on-turkeys-first-nuclear-plant-no-secret-minister-says.aspx?pageID=238&nID=83313&NewsCatID=510

[133]Kibaroglu Mustafa, "Turkey's Quest for Peaceful Nuclear Power" the Nonproliferation Review/Spring-Summer 1997

completed, and the laboratories and workshop construction was finished following year. In 1962, CNAEM was fully ready for its establishment under the General Secretariat of Atomic Energy Commission with the purpose to provide research, application, development and training activities in the field of nuclear energy. After CNAEM, Ankara Nuclear Research and Training Centre (ANAEM) was established in 1967. At the same year, on the basis of the Law 6821, Decree on Radiation and the following year Regulation on Radiation Health entered into force.[134] Later in 1982 TAEC was replaced by the Turkish Atomic Energy Authority. TAEA is responsible for establishing research and training centers, laboratories… for educating the personnel, collaborating with universities and organizations as well as enlightening the public.[135]

From the legal perspective, Turkish government established the law 5710 on "Establishment and Operation of Nuclear Power Plant with Energy for the sale of law," on 9 November 2007. The law 5710 indicates the purpose of the proper energy planning and policy. In addition to this, it also identifies the rules and regulations that it should be taken by the ministry of Energy and Natural Resource (MENR) and TAEK. The law 5710 also provides an information on licenses, permits and obligation regarding the facilitation of the nuclear power plants in Turkey. In that regard, the MENR is appointed as the main body of the Turkish Energy sector and responsible authority for the preparation and the implementation of energy plans, policies and programmes.[136] The council of Ministers is responsible to provide certain inducement

[134]TAEK, "History," Updated on 4 October 2010. http://www.taek.gov.tr/en/institutional/history.html

[135]Sari S., "Country Nuclear Power Profiles: Turkey," IAEA, updated 2014. (Accessed on 26 July 2016) http://wwwpub.iaea.org/MTCD/Publications/PDF/CNPP2014_CD/countryprofiles/Turkey/Turkey.htm

for investment in nuclear area regarding technology development and production of nuclear fuel with trained expertise to be able to work in the future nuclear power plants. The process of selecting a company for constructing the nuclear facilities, the nuclear energy law provides that MENR and TAEA is authorized to make selection on the related local or foreign company who fulfills the criteria, after the evaluation of the relevant ministries and public entities. One of the important factors in deciding which relevant company is to build nuclear facilities, is that the company who provides the price guarantee offers and the purchase guarantee offers in the lowest price will be awarded to construct and operate the nuclear power plant. The Nuclear Security Department and the Advisory Board of Nuclear Safety of TAEA (TAEK) are responsible authorities to regulate licensing activities as in Article 4 of the Nuclear Licensing by law. TAEA issues the rights and the obligations of the licensee under three categories that are; obtaining a TAEA site license, TAEA construction license, and an operation license.[137]

Under TAEA (TAEK) law 2690 was established to indicate that the nuclear energy will be used for civilian purposes and for the benefit of the country. Furthermore, TAEK, under the prime ministry, also specifies the duties, authorization and the responsible organs from the nuclear areas. It also indicates the decrees on the protection of environment and nuclear facilities.[138] In addition, apart from these two

[136]The Grand National Assembly, "Nükleer Güç Santralarının Kurulması ve İşletilmesi ile Enerji Satışına İlişkin Kanun, Kanun:5710" ratified 20 November 2007. (Accessed on 25 July 2016) https://www.tbmm.gov.tr/develop/owa/kanunlar_sd.durumu?kanun_no=5710

[137]"Nuclear Energy Legislation and Projects in Turkey" Cakmak Avukatlik Burosu, 21 July 2010. http://www.cakmak.av.tr/articles/Power/Nuclear%20Energy%20Legislation%20And%20Projects%20in%20Turkey.pdf

[138]Turkish Atomic Agency Authority, "TAEK Kanunu 2690," ratified 13 July 1982. (Accessed on 5 July 2016) http://www.taek.gov.tr/belgeler-formlar/mevzuat/kanunlar/TAEK-Kanunu/

laws and the decrees and amendments on transportation of the nuclear materials, there are still uncertainties in terms of fuel cycle, decommission and insurance. These doubts are also claimed to the main problems in Turkey that it does not have a complete nuclear energy policy.[139] Last but not least, the TAEK is also responsible for determining the national policy regarding the peaceful use of atomic energy.

Regarding Turkey's Nuclear Waste Management procedure, Turkey has become a member to international bodies like the Zangger Committee (ZC) in 1999, and the Nuclear Suppliers Group (NSG) for the purposes of exportation and control of nuclear materials and equipment. The permission for the export of nuclear materials, equipments and related technology was adopted in 2000 and was later amended in September 2004 by the Radiation Safety Decree. The responsibility for the control of exports and related materials has been addressed to the Turkish Atomic Energy Authority (TAEA). In this regard, TAEA is authorized to have international connections with other states in order to keep and maintain its functions effectively. In terms of radiation protection, the TAEA has all the legal authority and responsibility for the management of the radioactive waste, radiation protection and safe transportation of radioactive materials.[140] In Turkey, there is only one Radioactive Waste Management Division (RWMD) in Kucuk Cekemece Nuclear Research and Training Centre. This institution is responsible for the collection, storage, transportation and disposal of radioactive waste all over Turkey under three units known as; Low-Level Radioactive Waste Management Unit (LLRWMU), High-Level

[139]Sirin S. M., "Serbest Elektrik Piyasalari ve Nükleer Enerji:Birleşik kralık'tan Türkiye için Dersler" TSRF Conferences on Nuclear and Renewable Energy (2009).
[140] Nuclear Legislation in OECD and NEA Countries, Regulatory and Institutional Framework for Nuclear Activities Turkey, OECD 2008. Available at: https://www.oecd-nea.org/law/legislation/turkey.html

Radioactive Waste Management Unit and Radioactivity Measurement and Analysis Unit. Despite the fact that this institution does not have any reprocessing technology, it is responsible for controlling radioactive waste. In addition to this, Turkey has several regulations under TAEA on nuclear waste, the safe transportation of radioactive materials, and industrial radiography and legislation for the management of waste arising from the use of radioactive materials.[141]

According to the regulation on wastes from the use of radioactive materials, legal authority and decision making will be under TAEA, and as clarified under Article 5 and 6, any licensed official or private person, institution and/or organization who is authorized to use radioactive elements also has the responsibility of disposing of this waste under the given authority or personnel by the TAEA. Under Article 7, there are also specified limitations. For example, solid, liquid and gas waste cannot be reused nor reprocessed for any other use.[142]

The agreement between the Republic of Turkey and the Russian Federation on the Akkuyu Nuclear Power Plant holds that the project company (Rosatom) will provide nuclear fuel to the NPP. However, Article 12, of the agreement states that in the case of Russian-origin nuclear fuel, and depending on the agreement between the contracting parties, the reprocessing procedures may be pursued in Russia. Furthermore, the cross-border transportation of the nuclear fuel and radioactive

[141] Turkish Atomic Energy Authority, Radioactive Waste Management Division. Available at: http://www.taek.gov.tr/en/institutional/affiliates/cekmece-nuclear-research-and-training-center/349-radioactive-waste-management-division.html

[142] TAEA, Regulations on Wastes From The Use of Radioactive Materials. Avaliable at, Official Gazzette Date:2.9.2004, Official Gazette Number: 25571. Available at: http://www.taek.gov.tr/en/belgeler-formlar/documents/Regulations/radiation-safety/

material will be permitted according to the state's laws and regulations.[143] In this case, it can be asserted that Turkey's intentions on spent fuel and radioactive waste seem to lack transparency, since it does not clearly specify what will be done with such spent fuel management and nuclear radioactive waste.

In international context, Turkey became a member to the Non-Proliferation of Nuclear Weapons Treaty (NPT), and openly signed it on the 29th of January, 1969, and later, ratified it on April 17, 1980. It's long standing alliance with NATO since 1952, as well as its strong will against the proliferation of Weapons of Mass Destruction (WMD), and its commitment to the establishment of a nuclear free zone made Turkey sign the NPT.[144] For Turkey, the 1980s was also a period for focusing on strengthening capacity at the institutional level in the nuclear field, as well as ratification and signed international agreements such as; the ratification of the Non-Proliferation of Nuclear Weapons Treaty (NPT) on 17 April 1980[145]. Later, the republic of Turkey signed an agreement with the international atomic energy agency for application of the safe guards in connection with the treaty of the NPT in February 1982. By signing this agreement, Turkey accepted the principle of preventing the diversion of peaceful nuclear energy use to nuclear weapon or any other nuclear explosive devices.[146] Following these steps, Turkey signed IAEA additional protocol in July 2000 and put

[143] Milletlerarasi Andlaşma, Resmi Gazate, Wednesday 6, 2010. Available at: http://www.resmigazete.gov.tr/eskiler/2010/10/20101006-6.htm

[144] Ulgen Sinan, The Security Dimensions of Turkey's Nuclear Program: Nuclear Diplomacy and Non Proliferation Policies, for more information: http://www.edam.org.tr/edamnukleer/section5.pdf

[145] United Nations Office for Disarmament Affairs (UNODA), "Treaty on the Non-Proliferation of Nuclear Weapons" United Nations, 2016. Available at: http://disarmament.un.org/treaties/t/npt

[146]International Atomic Energy Agency, "The Text of the Agreement between Turkey and The Agency for the application of the safeguards…on Non Proliferation of Nuclear Weapons," INFCIRC/295 1982. Available at: http://www.taek.gov.tr/attachments/081_npt_denetim_eng.pdf

it in force in next year July 2001.[147] Signing and ratifying the additional protocol means that Turkey dedicates itself to contribute to international peace and security by supporting the nuclear weapon free zone principle. Turkey also became a member of the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD). However, interestingly enough, turkey adopted the join convention on the safety of spent fuel management and the safety radioactive waste management in Vienna 1997, yet it did not sign or ratified it.

The IAEA handled an Integrated Nuclear Infrastructure Review (INIR) in Turkey to evaluate the country's progress in obtaining the nuclear power program in 2013. Although the report was positive, it put forward a number of recommendations in order to strengthen the national policy on nuclear energy, the regulatory body, and the development of a stable plan for human resource development.[148] Turkey is also a signatory to international technical cooperation agreements with the United States, Germany, Jordan, South Korea, Ukraine and Argentina, as well as with the IAEA in order to develop human resources in the region. In addition to the international collaboration with other countries and entities, TAEK is also in the process of providing study programs with Russia in licensing the process of reactor designs for VVER-1200 nuclear reactor.[149] Furthermore, Turkey also made bilateral agreements with several countries as, Canada, Argentina, Germany, Korea, France, United States

[147] IAEA, Status of the Additional Protocol, updated on 26 February 2016. Available at: https://www.iaea.org/safeguards/safeguards-legal-framework/additional-protocol/status-of-additional-protocol

[148] World Nuclear Association, "Nuclear Power in Turkey", WNA, May 2016. Available at: http://www.world-nuclear.org/information-library/country-profiles/countries-t-z/turkey.aspx

[149] Banks John, Massy Kevin, Ebinger Charles, "Human Resource Development in New Nuclear Energy States: Case Studies from the Middle East," The Brookings Institution, 1775, Massachusetts Ave., NW, Washington, D.C., 20036, November 2012. Pp.1-39.

of America, Russia and Jordan for the collaboration in the use of nuclear energy for peaceful and civilian purposes.

Turkey has a long history in nuclear field starting back in 1950s, sincee then, it always supported the usage of peaceful nuclear energy consumption. To support the idea of Turkey's ambition in using nuclear energy for civilian purposes and the benefit of the country, Turkey signed; Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water (1963), Comprehensive Nuclear Test Ban Treaty (CNTBT), Nuclear Suppliers Group (NSG), Missile Technology Control Regime (MTCR) and Biological Weapons Convention (BWC).[150] Additonally, for export controls on conventional arms it has a signatory in the Wassenaar Arrangement and the global Arms Trade Treaty, the Seabed Arms Control Treaty (SACT), the Ottowa Convention, the Hague Code of Conduct Against Ballistic Missile Proliferation, the Chemical Weapons Convention (CWC).[151] Apart from these agreements, Turkey also has a signatory to the Paris Convention on Third Party Liability in the field of Nuclear Energy in 1982. This Convention establishes general principles of civil liability in case of nuclear accidents. In this sense, the convention requires from the member states to publish internal laws in order to regulate these issues. However, in Turkey's case, the country has not issued any internal law that details the civil liability concerns in case of nuclear accidents.[152] The list of the international, multilateral and bilateral agreements goes on that Turkey made throughout the years as well as it has also

[150]Ibid., p.27-28-29.

[151] Perkovich G and Ulgen S., p.134,77.

[152]Karaduman Ozan, "Nuclear Powers Up in Turkey," Energy and Natural Resources (April 8, 2015). Available at: http://gun.av.tr/nuclear-powers-up-in-turkey/

provided regulations, guidance and documents to prove its sincerity in peaceful nuclear energy facilitation. Turkey's membership to international treaties for the proper implementation of its legal obligations, Turkey also set of measures to fight against Nuclear smuggling. Kibaroglu suggests that the first set of measures are taken to establish "the inter-agency cooperation" within the state and other countries by also providing education and training in the field.[153] Moreover, Kibaroglu also states Turkey's partnership in the Global Initiative to Combat Nuclear Terrorism (GICNT) and its participation in the Proliferation Security initiative (PSI-in 2005) also proves that Turkey is against Nuclear Smuggling, and supports the non-usage of HEU and plutonium for producing weapons of mass destruction.[154] For the United States, particularly Turkey's participation to the PSI represented an important step as it showed Turkey intent to participate to the prevention of shipments of missile and nuclear technology from reaching Middle Eastern states that are potentially seen risky. The authors Ibrahim Al-Marashi and Nilsu Goren indicates that Turkey expresses its participation and support for the Global Initiative on Fight against Nuclear Terrorism and the Ministry of Foreign Affairs announced that Turkey supports al initiatives in the struggle against nuclear terrorism. These initiatives lead to intelligence sharing and technological cooperation with other states in the fields of securing radioactive sources and materials, preventing nuclear smuggling and significantly improving law enforcements actions to prevent proliferation of possible nuclear weapons.[155]

[153]Kibaroglu Mustafa, "Nuclear Security and Turkey Dealing with Nuclear Smuggling," in *Nuclear Security A Turkish Perspective* EDAM (2015).

[154]Kibaroglu., 88.

[155]Al-Marashi Ibrahim and Nilsu Goren, "Turkish Perception and Nuclear Proliferation," *Centre for Contemporary* Conflict (2009): 1-16.

According to National Progress Report in 2016, regarding the strengthening national nuclear and radiological material security system, Turkey relentlessly continues to follow IAEA's nuclear legislation and practices, safety and security principles, particularly the nuclear security recommendations on physical protection of nuclear material and facilities. Turkey also actively participates in the courses and the technical meetings hosted by the IAEA on nuclear safety. Within this context, Turkey shows its interest in Preventive and Protective Measures against Insider Threats at Nuclear Facilities as well as establishing nuclear security for research reactors and any related facilities. The report also indicates Turkey fully and entirely supports the implementation of UN Security Council Resolution 1540. In this regard, Turkish experts have full heartedly joined several regional and international training events to improve their horizons on matters related to this implementation.[156] Similarly prominent scholar Sinan Ulgen also emphasizes that Turkey also adopted the UN Security Council Resolution 1540 for the purpose of combating the proliferation of weapons of mass destruction and their means of delivery on an international level. Turkish Government also supports resolution 1810 of the 1540 Committee. In this regard, it is officially stated by the Turkish policy maker that Resolution 1540 contribute in universal combat against the proliferation of WMD.[157] Although Turkey follows its international and legal regulations in order to acquire its civilian nuclear energy program, this study also needs to look into potential security threats that Turkey faces. In this regard, next chapter explores the Security Model of Turkey from regional and global perspectives.

[156]Nuclear Security Summit, "National Progress Report: Turkey" March 31, 2016. Available at: http://www.nss2016.org/document-center-docs/2016/3/31/national-progress-report-turkey

[157]Ulgen, p.4

Chapter 3

SECURITY MODELS

3.1 Introduction

Nuclear weapon has been part of the international relations discourse from as far back as the 1940s when the United States developed and used the atomic bomb against the Japanese at the end of World War II. Since then the nuclear weapon has been a major factor in the Cold War period, and has continued to play a role in international politics especially among countries with different ideologies. With regards to Turkey's involvement in the nuclear debate, there has been a number of differing views ranging from; proliferation to nonproliferation to the total abolishment of nuclear energy, to the maintenance of international and regional stability. In trying to understand why Turkey has kept the nuclear weapons debate on the table all this time, one needs to visit the literature on this, as well as the divergent theories which have been advanced.

3.2 Literature Review/Theoretical Framework

The theory of Realism essentially reflects 19th century Europe Realpolitik,[158] and is a strand of rational choice theory. What is striking about realist is that most have taken a pessimistic and prudent view of International Relations. While alternative approaches challenge the inevitability of tragedy in world politics, even the critics of realism acknowledge that humankind has in the most times and in most places lived

[158] K. E. Jørgensen, International *Relations theory: A new introduction*. (Basingstoke: Palgrave Macmillan, 2010), pp. 79

down to its low expectations.[159] Within Realism, three main current thoughts can be identified, classical realism, neorealism and post realism.[160] These are not entirely separate approaches, but build upon one another or adopt different focal points. Unsurprisingly considering the political situation in Europe at the time, classical realism was established in the 1930s- 1950s. Its founding fathers were E. H. Carr (1939) and most famously Hans Morgenthau author of the Politics among Nations (1946). Classical realism emerged in response to the then dominant liberal approach to international Politics.[161]

First and foremost, classical realism posits that the international political sphere is composed of sovereign nation states.[162] They are considered unitary actors and thought to determine word politics. The absence of "a world government or overarching authority which self-consciously imposes order in a top down way onto sovereign states a condition referred to anarchy is permissive condition that gives human appetite for free reign".[163] By means of foreign policy instruments, states will always do their utmost to further what is perceived to be in the national interest so as to enhance their power.[164] This classical realism regards power as the essence of politics.

[159] C.Elman, Realism. In: M. Griffiths (ed.), *International Relations theory for the twenty-first century: An introduction*. (London: Routledge, 2007), pp. 1.
[160] Ibid, pp. 79.
[161] Ibid, pp. 12.
[162] C. Weber, International *relations theory: A critical introduction*. 3rd edition. (London: Routledge, 2010), pp 14.

[163] C. Weber, C, International *relations theory: A critical introduction*. 3rd edition. (London: Routledge, 2010), pp 14. and C.Elman, Realism. In: M. Griffiths (ed.), *International Relations theory for the twenty-first century: An introduction*. (London: Routledge, 2007), pp. 12.

[164] K. E. Jørgensen, International *Relations theory: A new introduction*. (Basingstoke: Palgrave Macmillan, 2010), pp. 83

From classical realist point of view, universal moral principles cannot be applied to the action of states.[165] Instead states follow a logic of consequences: state strategies are understood as having been decided rationally, with a view of maximizing state utility, after taking into consideration the costs and benefits of different possible courses of action.[166] States are considered rational egoist that pursue interests formed exogenously to social interaction in a rationally instrumental manner.[167] To say that national preferences are exogenous implies that they are shaped domestically and remain unaltered by interactions and institutions at the international level.[168] Consequently, collective behavior, too is explained as the aggregation of individual choices.[169]

In the 1980s, neorealism came into being, initiated by the work of Kenneth Waltz (1979). Waltz borrowed from classical realism the notion of states as unitary actors "billiards balls" and accepted anarchy as the ordering principle of the international system. According to neorealists however, sovereign states do not strive for power simply because of the flawed nature of humanity, but because they are faced with constant threats and security dilemmas.[170] Waltz claimed that the explanation for the behavior of states should be sought at their levels simultaneously; the individual level where humans are naturally self-interested, the state level where how a particular state's formal government and social arrangements are organized, and the international

[165] Ibid, pp. 87.
[166] C.Elman, Realism. In: M. Griffiths (ed.), *International Relations theory for the twenty-first century: An introduction*. (London: Routledge, 2007), pp. 13
[167] A. B. Phillips, Constructivism. In: M. Griffiths (ed.), *International Relations theory for the twenty-first century: An introduction*. London: Routledge, 2007), pp. 63
[168] M. A. Pollack, Rational choice and EU politics. In: K.E. Jørgensen, M.A. Pollack and B. Rosamond (eds.), *Handbook of European Union politics*. 2nd edition.(London: Sage Publications Ltd, 2007), pp. 45
[169] Ibid, pp. 32.
[170] C.Weber, *International relations theory: A critical introduction*. 3rd edition. (London: Routledge, 2010), pp 16

level where how states are positioned vis-a-vis one another in the international political environment. Self-help is a state's effort to guarantee its survival, but its precise strategies depend on its features and the circumstances of all three levels combined.[171]

3.3 Regional Threat

3.3.1 Iran

Since 1800, the opposition between Safavid Persian Shi'ism and Ottoman Islamic Doctorine dominated the Turkish-Iranian relationship. The signature of a peace agreement between the two countries helped to build appeased relationship thorough out the century. Each country recognizing a role in the Islamic community for the other despite differing interpretation in Islam. Peace relationship throughout the history Iran's energy wealth in resources has been the driving force in the peaceful relations between both countries.[172]

Despite the deep economic and security cooperation enjoyed by the two countries, there are fundamental differences in their political identities and ideologies Recent events of the Arab spring have changed the balance resulting in strained relations. Furthermore, Turkish support to Syrian opposition against Bashar al-Assad is in direct contrast to Iran's position as Syria is the only true ally of Iran's in the region since 1970s. Hence, removing Assad would create a major strategic loss for Iran and would result in Turkey asserting more power in the region.

From a Turkish perspective, the Iranian nuclear and ballistic missile program is an issue of great concern. This concern has led the Turkish government to collaborate in

[171] K. E. Jørgensen, *International Relations theory: A new introduction*. (Basingstoke: Palgrave Macmillan, 2010), pp. 89

[172] John Calabrese, "Turkey and Iran: Limits of a Stable Relationship", British Journal of Middle Eastern Studies, Vol. 25, No. 1, May 1998, p. 76

intelligence and operate a missile defense cooperation system with the United States and Israel. Turkey's increasing fear of Iran's longer range ballistic missiles have caused a change in NATO's defense mechanism as well as its nuclear policy, and a strong interest in counter proliferation.[173]

Erdogan when he was Prime Minister had always been supportive of Iran's uranium enrichment and nuclear program, in so far as it was for peaceful purposes. However, the International community have applied coercive sanctions; financial and diplomatic sanctions on Iran due to its mysterious nuclear activities.[174] Ulgen asserts that Iran's potential to acquire nuclear arms would impact on Turkish policy and security. This could also potentially cause a nuclear arms race in the Middle East.[175]

Iran views the attainment of nuclear power status as a deterrent. In this respect, nuclear weapon capability would serve as a deterrent against the United States who they perceive as an enemy to the Islamic republic of Iran. Iran also desires to be acknowledged as a great power by Muslims across the world. For these reasons, the Turkish government and military are concerned about a potential nuclear armed Iran.[176] In addition to this, Massoud Jazayeri, who is deputy head of Iran's Joint Chiefs of Staff Brigadier General openly said;

> Turkey should rethink its long-term strategic interests and draw lessons from bitter historical experiences of other countries…Ankara should rely more on the strength of its Muslim nation as well as the potency of

[173]Lesser Ian O., *NATO Looks South* (RAND Corporation, 2000).
[174] Ben-Meir Alon, "Can Turkey Defuse Iran Nuclear Challenge?" The World Post, 9 August 2010, 1,5.

[175]Ulgen Sinan, "Dimensions of Turkey's Nuclear Program: Nuclear Diplomacy and Non-proliferation policies," in The Turkish Model for Transition to Nuclear Power (2014): 138-180.

[176]Kibaroglu Mustafa and Caglar Baris, "Implications of a Nuclear Iran for Turkey," *Middle East Policy*, Vol. 15, No. 4, (2008): 1-15.

> Muslims elsewhere and assume a role geared towards improving security in the region.[177]

It is clear that Iran's nuclear ambitions is likely to become a great concern between the two countries. Although Turkey benefits from Iran's natural resources, it is not clear if the Turkish government could carry on relations with a nuclear-armed country in the region. The view of the Turkish government under AKP regarding Iran's nuclear capability was confirmed by Larrabee and Nader as they opine that Iran's acquisition of nuclear weapons could create a highly security concerns for Turkey and to that end, these concerns might force Ankara to acquire its own nuclear capability.[178] According to the survey carried by EDAM, 54% of the Turkish community supports the idea of Turkey's nuclear armament.[179]

3.3.2 Syria

The establishments of the Turkish and Syrian states could not be any more different. On the one hand the Turkish state was founded in 1923 by Ataturk out of remnants of the Ottoman Empire. It was both culturally and politically oriented towards Europe, with the Arabic script rejected in favor of Latin, as well as Arabic words removed from the Turkish Language. This European approached was carried even with their approach to foreign policy. The Syrian state on the other hand was more oriented towards the Middle East when it gained its independence from France in 1946, declaring itself the heart of Arab nationalism and declared Ottoman Turks as its repressive enemy. At the heart of this rivalry was the transfer of Alexandretta

[177]"Iran warns Turkey on NATO missile plan," *Press TV* (Accessed on: 23 July 2016) http://edition.presstv.ir/detail.fa/203734.html

[178]Larrabee F. Stephen and Nader Alizera, *Turkish-Iranian Relations in a Changing Middle East* (RAND Cooperation, 2013).

[179]Hurriyet Daily News "54 pct of Turks support nukes if Iran has them" published on 29 March 2012. http://www.hurriyetdailynews.com/54-pct-of-turks-support-nukes-if-iran-has-them.aspx?pageID=517&nID=17151&NewsCatID=341

(Iskenderun as it was called by the Turks) to Turkey by France. This has resulted in a strenuous relationship between Turkey and Syria, ranging from political and military tensions, to border disputes, to peaceful coexistence, smuggling and charges of internal subversion and very restrained and tensed diplomatic ties.

Turkey has in the past accused Syria of supporting the Armenian, Kurdish and Arab terrorist groups operating against Turkey. Turkey is also of the view that Syria offered training camps and arms to the Armenian Secret Army for the Liberation of Armenia and allows its members to cross the Syrian-Turkish border to attack Turkish targets. Turkey has also accused Syria of supporting Kurdish separatist groups. This accusation has caused great tensions between Turkey and Syria which in October 1998 resulted in Turkey threatening to invade Syria unless Syria stopped supporting the Kurdistan Workers' Party (PKK), -a guerrilla force fighting for a Kurdish homeland in southeastern Turkey. Turkey also demanded that Syria expel the group's leader, Abdullah Ocalan. Syria complied with Turkey's demands, expelling Ocalan and signing an agreement banning PKK activity in Syria.

However, with the civil war raging on in Syria since 2011 radicals and jihadist have become more dominant and this will no doubt strengthen the PKK in Syria thus affecting stability in Turkey. The Syrian Civil war is highly unlikely to end anytime soon especially as there is no quick fix to this problem. Resultantly, its effects on Turkey's stability might also be telling. This is one of the reasons why Turkey has always been an outspoken critic of Assad's regime. Erdoğan has called for Assad to leave power, has advocated for Western military intervention, and has partnered with Gulf Cooperation Council (GCC) states that also stand in opposition to Assad's regime. Turkey has also appealed to its own security as a Turkish official stated; "Assad's

action threatens regional peace and stability"[180] and that Turkey must take "necessary measures" to protect its border.[181] Turkey has also gone as far as negotiating with NATO in order to receive a deployment of Patriot missile batteries from the Netherlands, Germany, and the United States for its defense. This move was strongly opposed by both Moscow and Tehran because since 2011, Turkey has been a base for part of NATO's missile defense architecture and this largely a threat to Syria and Iran's ballistic missiles.

Intelligence reports claim that although Syria had a nuclear research effort and received a small supply of Chinese nuclear reactors, this has all happened within the parameters of the IAEA safeguards, hence, Syria is not pursuing any nuclear proliferation. Furthermore, Syria signed a broad cooperation agreement with Russia in May 1999 which clarified that Syria currently lacks the nuclear infrastructure and expertise to establish a nuclear weapons armament program.[182] According to Koch, Syria is pursuing a policy of developing a ballistic missiles and chemical weapons program in order to establish a strong deterrence against regional threats.[183]

[180]Küçükkoşum, Sevíl, "Turkey anxious over protest in Syria," Hürriyet Daily News, March, 22, 2011. http://www.hurriyetdailynews.com/default.aspx?pageid=438&n=turkey-anxious-over-protests-in-syria-2011-03-22

[181]Tagiyeva, A,"Ministry of Foreign Affairs: Turkey has right to take any measures to protect its borders." Trend, July 24, 2013 http://en.trend.az/azerbaijan/politics/2173614.html

[182]Office of the Secretary Defense, "Proliferation Threat and Response," January 2001. http://www.dod.gov/pubs/ptr20010110.pdf

[183]Koch Andrew, "Israel Say Syria Continues with WMD," *Jane's Defense Weekly* (2000).

Similarly, Iraq had intended to obtain a comprehensive nuclear weapons armament program before the Gulf War. The initial program was focused on developing an "implosion-type device" that was connected to ballistic missile projects.[184] Later, Iraq's nuclear desire of acquiring weapons was kept under the strict control of the IAEA and the United Nations Special Commission on Iraq (UNSCOM) between 1991 and 1998.[185] However, Iraq rejected to cooperate with IAEA for further collaboration in October 1998, which caused concerns that Iran might not abandon its nuclear weapons ambition. Although there is no proof that Iraq does not have any nuclear weapons seeing as it is a member of the Comprehensive Nuclear Test Ban Treaty (CTBT) and the IAEA Additional Protocol, there is growing concern that with the rise of the Islamic State (IS), if there are any nuclear facilities in the area, and IS captures any, it would create instability and change the power balance in the region.[186]

3.3.3 Russia

Turkey and Russia have had a long and complicated relationship spanning over 500 years. Throughout this period, their economic, political, historic and cultural bearings have impacted each other, and the other countries and communities with which they have entered into relations. The relationship both countries enjoy today is as a result of various phases and turns that have followed a convoluted path. During the imperial era of the Ottoman and Russian Empires, the Turk and Russian wars began in the 1500s and continued until the end of the 1800s. Despite the shaky start, from as early as the 1920s Turkey recognized the USSR, and the USSR repaid this faith by being one of the first great powers that recognized the government of Ankara during the Turkish

[184]Proliferation Threat and Response, p.39.

[185]Ibid. p.40

[186]NTI, "Iraq," updated July 2015, (Accessed on 15 July 2016) http://www.nti.org/learn/countries/iraq/nuclear/

war of Liberation. Turkey had its first bilateral agreement with Russia based on the idea of neutrality, non-aggression and mutual consultation. However, relations turned sour in 1952 with Turkey's membership to NATO and increasing support from the US.[187]

In the 1990s Turkey and Russia explored opportunities for military cooperation when Turkey's Western allies were unwilling to provide the necessary military technology and equipment at a time when turkey was involved with fights against the PKK. Turkey and Russia were described even at the official level as "strategic partners" and some key decision-makers even speculated forming an "alliance" against Europe[188].

The collapse of the Soviet Union changed the power structure of the Turkish-Russian relationship which saw a radical reduction in Russia's economic and military strategic advantage over Turkey and with the independence of Georgia the disappearance of a common border between both states for the first time. Moscow was no longer perceived as the threat they were during the Cold War. This resulted in a changed relationship that facilitated an improved Turkish-Russian cooperation. The interests of both countries seemed to converge on the Iraq war and against domestic separatist terrorist groups.[189]

[187] Sezer, Duygu Bazoğlu, Turkish-Russia relations: The Challenges of reconciling geopolitical competition with economic partnership, The Journal of Turkish Studies, published online, April 2007 pp. 59-82.

[188] Aktürk, Şener. "Turkish–Russian Relations after the Cold War (1992–2002)." Turkish Studies 7, no. 3 (2006) pp, 337–364.

[189] Aktürk, Şener. "Turkish–Russian Relations after the Cold War (1992–2002)." Turkish Studies 7, no. 3 (2006), pp. 337–364.

Despite these convergences there are some differences between the Turks and Russians especially with regards to NATO's expansion in Europe which the Russians stand in opposition to. They are also on opposite sides of the aisle on the issue of the missile defense shield project which Turkey stands to benefit from, by hosting in their territory. Two major events that have been a bone of contention in Russo-Turkish relations, and which have caused great tension between Moscow and Ankara; "Five Day War" between Russia and Georgia in August 2008, and the Syrian civil war which began in 2011. This has even brought the two countries to the brink of proxy war.

> Syria has already turned into a proxy conflict, with Ankara not only seeking Syrian President Bashar al-Assad's ouster, but also supporting Sunni rebel groups that Moscow considers terrorists. Russia (along with Iran) has provided the Syrian regime unstinting support, including through a direct military intervention that has allowed Assad to regain momentum on the ground in recent weeks, scuttling international peace talks in Geneva. But the war has been a disaster for Turkey. More than 2.5 million refugees have made their way to the country, and the PKK-linked Democratic Union Party (PYD) has established a Kurdish proto-state right on Turkey's border, even as Ankara's war with the PKK inside Turkey has heated up again. Ankara has tried to contain the crisis, but Moscow has used it to whip up nationalist sentiment against Turkey while imposing sanctions that may cost the Turkish economy 0.5 percent of its GDP this year. Russian forces have also increased air attacks against Turkish proxies in Syria and ramped up support for the PYD. Russia understands that Turkey is under enormous strain from the refugee crisis, terrorist attacks linked to the so-called Islamic State (ISIS), and renewed warfare with the PKK, and seeks to press its advantage.[190]

3.4 Global Threat

3.4.1 USA

Turkey has been an ally and strategic partner to the United States for decades. The Cold War is one of the main reasons which prompted the US to invest heavily in

[190] Mankoff, Jeffrey, "Why Russia and Turkey fight: A History of Antagonism," Foreign Affairs Magazine, Council on Foreign Relations, (February 24, 2016):1-6

Turkey's defense, military and economic development. However, the situation has evolved as the dynamics within both countries and the regional and global environments have changed. Turkey is a member of the international arrangement toward non-proliferation of nuclear weapons such as the Non Proliferation Treaty of the International Atomic Energy Agency. The United States policy has consistently asked for Turkey's support against Iran especially as Iran moved closer to a nuclear power. Both countries have also signed several cooperation agreements and protocols hindering the proliferation and traffic of Weapons of Mass Destruction.[191]

During the heights of the Cold War period, Turkey served as block to the expansion of the Soviet Union in the Middle East and also in the Mediterranean region. While the strategic importance of Turkey to the US is no longer related to countering the threat from the Soviet Union, today it provides a gateway for the United States into the Middle East and the Muslim world. Turkey is also a strategic partner for stability in the region.[192]

Turkey has hosted to US nuclear weapons and aircrafts, and is a supporter of marinating these weapons in Europe. However, since 1995 Turkey has decertified the pilots it had trained to carry nuclear weapons, therefore relying totally on the US to do so, despite possibilities that neighboring countries like Iraq, Iran and Syria could succeed in building nuclear facilities capable of making nuclear bombs. In addition to Turkey's strategic importance to the United States is its willingness to house US nuclear weapons at the Incirlik Air Base. A 2005 report states that "about 90 U.S.

[191] Davutoglu, Ahmet, "Principles of Turkish Foreign Policy and Regional Political Structuring," International Policy and Leadership Institute and Economic Policy Research Foundation of Turkey (TEPAV), Turkey Policy Brief Series (2012): 1-9.

[192] Stein, Aaron, "Is Turkey going Nuclear?" The American Interest, (2015): 1-7 http://www.the-american-interest.com/2015/08/25/is-turkey-going-nuclear

nuclear weapons were stored there under NATOs auspices."[193] Although Turkey has the right to deny US access with a three days' notice, it has not activated this option.

Despite being a strategic and strong ally to the US, to the extent of even supporting the US during the invasion of Iraq, there have still been thaws in US-Turkey relations, which especially began to deepen since 2013. However, it was only with the 2014 elections that the relations with the "new" government began to sour even more. The "new" leaders are charting a course of an authoritarian centralized power in a drive towards Islamism, with neither constitutional limits nor institutional checks and balances and supporting radical Sunni Islamists at the expense of peace and stability in the region, these tenets are inconsistent with US policy and governance[194]. Deeper cracks in the relationship were revealed when Turkey refused to allow US coalition forces to use its airbase at Incirlik, even for combat search and rescue missions. This decision by Turkey, a member of the NATO, not only reduces the effectiveness of the campaign against ISIS, but it places the lives of American and allied forces at risk.[195]

Further divergences between the two countries policies have also been evident outside the Middle East. This was evident as Turkey refused to participate in the US and EU sanctions regime against Russia as a response to its aggression in Ukraine. Instead, Turkey and Russia have moved closer to each other with Turkey increasing trade and

[193] Migdalovitz, Carol, Turkey: Selected Foreign Policy Issues and U.S. Views, Congressional Research Service, November 28, 2010, pp 50

[194] Cornell,Svante E., "Turkey and the Sunni Bloc: Ankara Adjusts its Middle East Priorities," Turkey Analyst, April 8, 2015

[195] Ozerkan, Fulya, Turkey not taking part in combat mission against IS:offical, Arab New, September 11, 2014, http://www.arabnews.com/middle-east/news/628546#

strengthening their energy partnership[196]. When the relationship with Europe and Russia faltered resulting in Russia having to cancel the South stream gas pipeline that would have traversed Bulgaria, Erdoğan and Putin announced an alternative pipeline, called the Turkish stream. This pipeline will transport Russian gas to Europe through Turkey[197]. In addition, Turkey has continued to court a nuclear deal for a domestic missile defense system with a Chinese company that is under US sanctions because of its dealing with Iran. Also, the Chinese product would be incompatible with NATO systems already in place.[198]

The domestic policy being pursued by the Turkish government is also at odds with the US. This was evident at a recent joint press conference with the EU foreign policy chief after the failed coup where the Secretary of the State for the United States John Kerry warned that Turkey could run foul with NATO's requirements; " requirement with respect to democracy and respect, if they failed to uphold the rule of law in wake of the attempted coup."[199] There is growing concern among US policy makers that the US-Turkey relationship is not fully benefitting the US at the moment and if Turkey is no longer willing to help the US in achieving it strategic objectives then their resources would be better served with seeking new regional partners that are willing to serve US

[196]Sevil Erkus, "NATO Calls On Turkey to Join EU Sanctions Against Russia as Putin Visits Ankara," Hurriyet Daily News, December 1, 2014, http://www.hurriyetdailynews.com/nato-calls-on-turkey-to-join-eu-sanctions-against-russia-as-putin-visits-ankara.aspx?pageID=238&nID=75048&NewsCatID=510

[197] Cetingulec,Mehmet, "What Will Turkey Do if Russia Turns Off Gas?" al-Monitor, September 23, 2014, http://www.al-monitor.com/pulse/originals/2014/09/turkey-russia-ukraine-european-union-natural-gas-tanap.html

[198] Idiz,Semih "Turkey's Choice: Chinese Missile Defense or NATO?" Trans. Ezgi Akin, al-Monitor, October 25, 2013, http://www.al-monitor.com/pulse/originals/2013/10/missile-nato-turkey-china-defense.html

[199] Gould, Lee, "Analyst predict rift in US-Turkey relationship," Defense News, July 20, 2016 http://www.defensenews.com/story/war-in-syria/2016/07/20/analysts-predict-rifts-uk-turkey-relationship/87351754/

interest in the region. This would mean a dramatic change in US-Turkey nuclear relations. The possible regional and global threats against Turkey have been analyzed in this security chapter. Chapter four gives analysis of the domestic politics model in Turkey. It looks in the change of Government types in Turkey and describes how Turkish governments are personalist leaders. This chapter will also give an overview of the internal bureaucratic struggles and the domestic debates.

Chapter 4

THE DOMESTIC POLITICS MODEL

4.1 Introduction

Chapter 4 examines the domestic politics model and its relevance to the case of Turkey. The researcher in this chapter claims that the leaders of the previous government as well as the military are domestic bureaucratic actors. However, the current leader of AK-Party President Erdoğan is a personalist leader. Finally, this chapter will underline the domestic debates and the bureaucratic struggles within the current government.

4.2 Literature View

Realists maintain that nuclear weapons are pursued when states perceive major security threats. On the other hand, liberal theories do not agree with the unitary actor assumptions of systemic theories. The proponents of liberal theories stress the importance of domestic politics. Thus, nuclear weapons are considered to be more than just a national security tool. Prominent scholar Sagan presents three main reasons for a state's decision to pursue nuclear proliferation. First and foremost, nuclear energy establishments can be one of the key actors, including companies and scientific institutions. Second, the military can also be counted as a domestic bureaucratic actor. Third, political leaders in order to gain more popularity and garner public support tend to take advantage of the nuclear weapons issue. In order to comprehend the internal domestic debates between political leaders it is essential to grasp that state's decision to proliferate. According to Sagan, "the notion of emerging or diminishing threats can

be used in the internal debate to create momentum either for or against nuclear weapons."[200] Therefore, Sagan contends that "decisions pertaining to nuclear armament or disarmament are not only made in agreement with alleged threats but also due to internal political changes and power struggles."[201] Hence, nuclear weapons programs are not inevitable or obvious solutions to international security problems, rather they justify their existence.[202] George Perkovich claims that the driving force for India's nuclear weapons program were dominated by domestic factors even more than external security concerns.[203] An example is Prime Minister Atal Bihari Vajpayee who pushed for nuclear weapons in a bid to generate domestic public support for his nationalist Bharatiya Janata Party.[204] Meeting security threats is also significant for national interest; nevertheless, a rational analysis of the threat environment also supports display of alternative motivations.

There are also numerous studies concentrating particularly on the relationship between nuclear proliferation and domestic political institutions. For example, the literature on the democratic peace theory focuses on the differences between autocracies and democracies. Various scholars have maintained that "democracies are less likely to pursue nuclear weapons."[205] Glenn Chafetz claims that democracies are able to restrain

[200]Scott D. Sagan, Why Do States Build Nuclear Weapons?: Three Models in Search of a Bomb. International Security, Vol. 21, No. 3. (Winter, 1996-1997), 54-86

[201] Sagan, 69.

[202]Sagan,70.

[203]George Perkovich, in *Dangerous Deterrent: Nuclear Weapons Proliferation and Conflict in South Asia*, (NUS Press), 2009, p.83.

[5]Peter Beckman et. Al, The Nuclear Predicament: Nuclear Weapons in the Twenty-First Century, third ed. (Upper Saddle River, NJ: Prentice Hall, 2000), pp. 214-215.

[205] Thesis…

security dilemmas which may, in turn, cause nuclear proliferation. "With the spread of democracy comes a reduced threat of nuclear proliferation."[206] Sasikumar and Way stress that democracies are more transparent compared to autocratic regimes which can hinder security elites from keeping a nuclear program in a sheltered "strategic enclave."[207] Democratic states make a commitment to non-proliferation by joining the NPT. In turn, some scholars argue that these commitments are more enduring.[208] Last but not least, Cirincione emphasizes that civil society and citizen campaigns against nuclear weapons can also have an impact on policy. Consequently, "campaigns are more likely to be effective in democratic societies."[209]

On the contrary, there are other scholars who contend that regime type has no or little impact on nuclear proliferation. "This is based on the premise that motivations for proliferation are largely similar among all states, regardless of whether the state is democratic or autocratic."[210] For example, studies concentrating on the role of particular leaders have not correlated "leader characteristics to regime type."[211] In addition, there are studies which have focused particularly on "strategies of regime survival." They state in a bid to cling to power, leaders who are inward-looking are prepared to endure the costs of proliferation.[212] Finally, Snyder stresses that democracy

[206] Glenn Chafetz, "The End of the Cold War and the Future of Nuclear Proliferation: An Alternative to the Neorealist Perspective," in The Proliferation Puzzle: Why Nuclear Weapons Spread (And What Results), eds. Z. S Davis and B. Frankel, Portland: Frank Cass & Company, 1993.
[207] Karthika Sasikumar and Christopher Way, "Testing Theories of Nuclear Proliferation: The Case of South Asia," in Inside Nuclear South Asia, Ed. Scott D. Sagan, Stanford, CA: Stanford Security Studies, 2009.
[208]Steven E. Miller and Scott D. Sagan, "Nuclear Power without nuclear proliferation?" Daedalus 138 (2007), pp. 7-18
[209] Joseph Cirincione, Bomb Scare: The History and Future of Nuclear Weapons, 1st ed. Columbia University Press, 2008.
[210]Alexander H. Montgomery, "Ringing in proliferation: How to dismantle an atomic bomb network," International Security 30 (2007): 153-187.
[211]Jacques E. C. Hymans, The Psychology of Nuclear Proliferation: Identity, Emotions and Foreign Policy, Cambridge University Press, 2006.
[212]Etel Solingen, Nuclear Logics: Contrasting Paths in East Asia & the Middle East, Princeton University Press, Princeton, NJ: 2007.

can indeed bolster proliferation because democratic governments tend to accommodate nationalistic populations because they aspire to extend their networks, in order to retain power.[213] This can be observed in countries like India, Pakistan and France, where nuclear weapon programs have had substantial public support. This suggests that even democratic governments with quite transparent political systems may also seek to possess nuclear weapons in order to gain support. Correspondingly, empirical studies have failed to provide substantial evidence to prove that autocracies and democracies have dissimilar rates of nuclear proliferation. For instance, in 2004, Singh and Way conducted a cross-national statistical analysis of nuclear proliferation, where scholars' came across no clear evidence of democracy on either the pursuit or exploration of nuclear weapons.[214] Moreover, Jo and Gartzke found that democracy has only a minor effect on both nuclear acquisition and pursuit. In turn, they deduce that an emphasis on regime type is not necessary.[215]

Michael Horowitz finds no relationship between a country's political entity (Polity score) and its prospect of pursuing a nuclear weapons program.[216] Moreover, Fuhrmann explores the link between proliferation and civilian nuclear technology, and finds no interrelations between weapons proliferation and democracy.[217] Qualitative methods have also provided parallel deductions. Campbell, Einhorn, and Reiss found mixed evidence that democratic institutions have a significant impact on a state's

[213] J.L. Snyder, From voting to violence: democratization and nationalist conflict, New York: W.W. Norton, 2000.
[214]Sonali Singh and Christopher Way, "The Correlates of Nuclear Proliferation," Journal of Conflict Resolution 48 (2004), pp. 859-885.
[215]Dong-Joon Jo and Erik Gartzke, "Determinants of Nuclear Weapons Proliferation" The Journal of Conflict Resolution 51 (2007), p.167.
[216]Michael Horowitz, the diffusion of military power! causes and consequences for international politics, Princeton, NJ: Princeton University Press, 2010.
[217] Matthew Fuhrmann, "Spreading Temptation: Proliferation and Peaceful Nuclear Cooperation Agreements," International Security 34 (2009): 7-41.

pursuit of nuclear weapons, by employing comparative case studies.[218] Sasikumar and Way assert that, "democracy… does not promote nuclear restraint."[219] Correspondingly, although with a focus on the Middle East and East Asia, Solingen argues that regime type does not elucidate variations in nuclear proliferation.[220]

Nevertheless, other prominent scholars are dubious about the conclusion of these scholars because they maintain that the definition of regime types is not conceptualized aptly. There is, in other words, considerable dissimilarity of institutions among both autocratic regimes and democratic governments, which needs to be clarified.

Hence, the growing literature on the politics of authoritarianism has disclosed immense variation, in respect to, the domestic institutional structure of dictatorships, which includes nuclear proliferation. Christopher Way argues that we need to move beyond the Polity score's (scale) concentrating on dictatorship/democracy distinction in order to attain a deeper knowledge of the potential relationship between domestic politics/regime type and nuclear policy. Way further asserts that in addition to environmental, economic and technical factors, political factors play an important role in undercovering the "likelihood, extent, and dynamics of the nuclear energy revival."[221]

One of the most significant ways that authoritarian regimes differ from democracies is the existence and competence of domestic institutions to limit or constrain the

[218] Kurt M. Campbell, Robert J. Einhorn, and Mitchell Reiss, The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices, Brookings Institution Press, 2004.
[219] See Sasikumar and Way.
[220] See Solingen.
[221] Christopher Way, "The Politics of Nuclear Renaissance," in The Nuclear Renaissance and International Security, Ed. Adam N. Stulberg and Matthew Fuhrmann. Stanford University Press, 2013.

executive powers of leaders. Barbara Geddes points out to a specific type of authoritarian regime, mostly referred to as; personalistic, despotic, or sultanistic, wherein the leader holds control of government decision-making. In personalistic regimes, institutions such as political parties and the military are insignificant because one individual controls all of the state's executive powers and state structure.[222] The leader has total control and is unrestricted in the decision-making process. This concept is similar to the idea of neopatrimonialism in the personalist regime. These regimes may have also well-developed bureaucracies. However, this may be the case only if the regime is controlled and commanded by a single individual.[223] More often than not, the motives of the leaders vary and are often different from that of leaders in democracies.

A psychological analysis of tyranic leaders discloses the fact that "the types of leaders who become personalist in nature are often incredibly narcissistic with splendid ambitions."[224] Therefore, Christopher Way maintains that personalist regimes are more likely to have perceptible patterns of nuclear technology policy than other autocratic regimes.

Prestige is interlinked to the pursuit of nuclear energy as a motive. Personalist leaders are motivated by status objectives and the aspiration for national autonomy.[225] Additionally, they are in need of validating their "magnificent self-perceptions"

[222] Barbara Geddes, Paradigms and sand castles! theory building and research design in comparative politics, (Ann Arbor: University of Michigan Press, 2003.)
[223] Alexander H. Montgomery, "Stop Helping Me: When Nuclear Assistance Impedes Nuclear Programs," in Nuclear Renaissance and International Security Workshop, February 2010.
[224] Betty Glad, "Why tyrants go too far: Malignant narcissism and absolute power," Political Psychology 23 (2002), pp. 1-2.
[225] See Hymans, 2006

through "largescale technological projects".[226] Hence, such regimes may indeed advance nuclear technology. Nevertheless, "personalist regimes tend to eviscerate institutions that promote alternative sources of power."[227] Montgomery contends that these regimes may be "unbelievably incompetent" and "inefficient" in their endeavor to pursue large-scale technological projects. Subsequently, even though personalist regimes do have interest in developing nuclear programs, they are mostly incapable of managing these projects efficiently. Way and Week maintain that personalist dictatorships specifically, are more likely to perceive nuclear weapons as an appealing alternative to providing regime security. In addition, they face fewer limitations and constraints in pursuing this strategy than leaders in other types of regimes (non-personalist authoritarian regimes and democracies).[228]

4.3 Identifying Regime Types in Turkey

Based on the discussions above, it can be observed that understanding how to classify Turkey's regimes is a significant component in explaining the research question. During the first half of the 20th century, the Turkish military was able to establish its political existence with the 1909 coup's reformist administration of the "Young Turks" and Ataturk's modernization programme. However, after the Second World War, a decrease in grain prices internationally coupled with the rise of the economic elite played a huge role in restructuring the Turkish political atmosphere. These two factors put pressure on the military's political influence and the one-party system of representation. As a result, in the 1950s, there were "multi-party elections in Turkey" which brought to power a civilian government headed by businessmen and

[226] Jerrold Post, "Current Concepts of the Narcissistic Personality: Implications for Political Psychology," Political Psychology 14 (1993), pp. 99-121.
[227] Post., 109.
[228] Christopher Way and Jessica Weeks, "Making it Personal: Regime Type and Nuclear Proliferation," July 2012.

agriculturists and hence decreased the power of the military in Ankara. As a result, Turkey changed its path from a previous focus on economic enterprise within the industrial sector to rural mechanization.[229] In addition, the Turkish Government's decision in 1952 to become a member of NATO internationalized the command of the Turkish military force. Harris stresses that the existence of many American military advisors clearly meant "no longer was the protection of the country… a function of Turkish forces and their deployment alone.[230] On his part, Nordlinger observed that the military staff controlled by American military advisors created a "functional rival" in the Turkish army hierarchy. More often than not, Nordlinger's approach focuses on "intra-state agents," however, applies the concept of military force in Turkey, Americas concern was clearly on "the cost-effectiveness and expandability of using local subordinates."[231] Furthermore, the alteration in the influence of the military force was also related to the mid-1950s inflationary period which led to a drastic reduction of the salary of public sector workers. The majority of Turkish military officials claimed that this economic recession was as a result of the civilian administration's investment in agricultural projects.[232] As a consequence of these projects and agricultural mechanization, large numbers of persons migrated to the western part of Turkey in order to create strong bonds and establish a "Kurdish Identity."[233] This movement of migrants from the West to the Kurdish areas, was a call for concern in the military ranks, especially amongst those who identified themselves as the pioneers of the revolution that had come from the last period of the Ottoman Empire.[234] Due to

[229] Aktan R. "Mechanisation of Agricuture in Turkey," *Land Economics*, 33 (1957): 273-285.
[230] Harris, G. (1972) "Troubled Alliance: Turkish-American Problems in Historical Perspective*",* 1945–1971, Stanford, CA, AEI-Hoover Institutional Studies.
[231] Avcıoglu, D. (1969) *Türkiye'nin Düzeni*. Ankara: Ankara University Press.
[232] Ergil, D, "Class Conflict and Turkish Transformation," Studia Islamica (1975), 6, 137-61
[233] Mcdowall, D, "A Modern History of the Kurds," London: I. B. Tauris. 1992.
[234] Hale, W., "The Turkish Army in Politics, 1960-1973," in A. Finkel and N. Sirman (eds), Turkish State, Turkish Society, 1990, London: Routledge, pp. 53-78.

this Kurdish factor, the Turkish military, true to their traditional role as "protector" of the Turkish nation as well as their high level influence over party politics, once more overthrew the government in the 1960s in a coup. Many scholars have argued that the military was mostly concerned with the rise of a capitalist class which might have adopted a foreign policy different from that of the military, which was concentrated on Middle Eastern polities. As Karaosmanoglu claims, the military's influence on Turkish politics could be classified as that of an "independent protector of progressive Kemalist values"[235]

On the other hand, according to Vaner, "Kemalism is an authoritarian reformism and aspiration to a Western style democracy" that these values are contrarily confounding.[236] The emergence of a capitalist form of power in the 1940s and 1950s brought disharmony between the military and civilian governments in Turkey. This also indicates that the idea of attributing the rise of capitalism to the Turkish military is doubtful. Additionally, there also exists a divided democratic and authoritarian nature within the army. This division was visible during the 1960s military coup. Some of the plotters under Alparslan Turkes, were interested in a single party regime and complete military control as had been in the previous government after the 1950s coup. However, the other group insisted on establishing strong ties with capitalists and direct control over the government for only limited time.[237] As a consequence of these difference in opinions, there was a rift between the two groups (supporters of ole military regime and supporters of the new military regime). This internal conflict was

[235] Karaosmanoglu, A., "Officers: Westernisation and Democracy," in M. Heper, A. Oncu and H. Kramer (eds), Turkey and the West, London: I. B. Tauris, pp. 19-34.
s[236] Vaner, S., "The Army," trans. R. Benatar and I. Shick, in I. Shick and E. Tonak (eds), Turkey in Transition, 1987, Oxford: Oxford University Press, pp. 236-265.
[237] Karpat, K., "The Military and Politics in Turkey: A Socio-Cultural Analysis of a Revolution," *American Historical Review*, 1970, 75, 1654-83.

resolved in two ways. According Ergin, the first way was to accept control by a more liberal government established through the Istanbul University which subsequently won the majority of votes in the 1961 elections. This is what is referred to as Mann's ideal type of semi-authoritarian incorporation. In this respect, the military elite recognized "left-wing" intellectualism, while securing a considerable amount of political power and influence in the decision-making process. Military officers accepted to become permanent members of the senate, in order to protect the interests of the military by vetoing decrees and bills which were not in favor of military values and interest, and also to maintain control over the civilian president. Hence, the army could intervene if its interests were not protected. Also, government had to take decisions based on the demands of the elites in the senate, rather than general action under the National Security Council (NSA-Milli Guvenlik Konseyi).[238] All of this can be attributed to the semi-authoritarian incorporation, "an attitude of benevolence bordering on complicity from the civilian leadership and to assert military authority vis-à-vis their internal constituency.[239] Secondly, Colonel Turkes's National Action Party (NAP-Milliyetci Hareket Partisi) offered a political expression to the military staff and the elites within the army. After the 1960s-military coup, it can be seen that Colonel Turkeş left his role within the military, sought to incorporate himself into political movement within the "national-socialist bent" which was inspired by "a doctrine of civil war."[240] In this regard, the party's interest was gathering youth society in order to arrange "paramilitary demonstration" and "youth protest. Even though the NAP political party refused any allegations to Nazi empathies, the party set its

[238] Ergil, p.144.
[239] Vaner, 249.
[240] Bozarslan, H., "Political Crisis and Kurdish Issue in Turkey," in R. Olson (ed.), 1996, The Kurdish Nationalist Movement in the 1990s, London: The University Press of Kentucky, pp 135-154.

temporary concern as bringing a common ground for democratic institutions in Turkey.[241]

An emphasis on Türkeş's administration, demonstrates that the NAP political party proved a useful advantage from a military perspective. For example, at the end of 1960s and beginning of the 1970s there was a rise of left intellectualism within the military officers and elite. Of particular concern during this time was the information being spread around that the reformist National Democratic Movement (Milli Demokratik Devrim) was establishing contacts between middle and high ranking army soldiers.[242] Following the rumors, it was a general held thought that this was the reason why there was another coup in Turkey in 1971. Hence, with the help of the CIA those military officers who fabricated documents in order to get involved in politics which was in contradiction to the rules of the military were identified[243] One of the other potential benefits of supporting NAP was to regulate social disorder. Activists in NAP under Turkes's administration played a crucial role in launching "martial law" in order to capture many socialists during the 1971 coup. Later, following the 1973 elections, Alparslan Turkes was assigned as Deputy Prime Minister and had power to control two ministries after receiving 3.4% of the votes.[244] In addition, Turkes was also given control over the education ministry with support from Ali Naili Erdem's right wing.[245] Nevertheless, at the same time, the Turkish Government suffered from NAP's paramilitary and violent acts while American Intelligence units gave support to these

[241] Landau, Jacob M., "Radical Politics in Turkey," Leiden: E. J. Brill, 1974.
[242]Samim, A., "The Left" in I. Schick and E. Tonak (eds), 1987, Turkey in Transition, Oxford: Oxford University Press, pp. 147-176.
[243]Cem, Ismail, "Tarih Açısından 12 Mart," Turkiye Is Bankasi Yayinlari.
[244]Cizre Sakallioglu, Ü., "The Ideology and Politics of the National Action Party of Turkey," Cahiers D'estudes sur la Mediterranee Orientale et le Monde Turco-Iranien, 1992, 13, pp.141-164
[245]Keyder, C., "The Political Economy of Turkish Democracy," in I. Schik and E. Tonak (eds), (1987a), Turkey in Transition. Oxford: Oxford University Press, pp.27-65.

actions.[246] Ahmad suggests that the genuine purpose of NAP's violent acts against the government was to stress the so called threat from "left wing". It sought to strengthen its position in the Great National Assembly of Turkey and to increase its influence in the country.[247] In this regard, it can be categorized that there were three possible threats to martial authority; rise of political left, NAP's involvement in the public sector, and more importantly Kurdish segregation tendencies. Kurdish separatism stood as a crucial factor in terms of political influence because more than 50% of the Turkish middle class consisted of refugees and migrants that were mostly of Kurdish decent.[248] The army was faced with the problem of increasing its influence in the Kurdish region in the South East part of Turkey especially as army cadet intakes were supplying 1.8% of overall income between 1982 to1984.[249] This is why, middle-ranking officers in the military were trained to strengthen control in the South east specifically in the Kurdish regions which were under strict martial laws in the late 70s and early 80s. On the contrary, the emergence of left intellectualism in the military engaged with Turkes's NAP political view that control over all levels of the government was a serious concern to the influence of the armed forces and their chain of command.[250] These provisions put in place by the high command could be interpreted as the targets for the supporters of right intellectualism, and where put in a bid to prevent those middle-ranking military officers from creating any influence in the political center. These permanent and persistent acts of the military administration in especially the Kurdish provinces could be explained as the high command's search to establish a rightist authoritarian approach on the Kurdish people and on the officers to make them stop their

[246]Çelik, S. "Olum Makinasi: Turk Kontra-Gerillasi," Cologne: Ulkem Press, 1995.
[247]Ahmad, Feroz, "*The Turkish Experiment in Democracy 1950-1975,"* London: C. Hurst, 1977.
[248]Barchard, D., "Turkey and the West," London: Royal Institute of International Affairs, 1985.
[249]Brown, J., "The Military and Society: The Turkish Case," Middle Eastern Studies, 1989, 25, pp.387-404.
[250]Schick, I. and Tonak, E., "Turkey in Transition," Oxford University Press, 1987, pp.147-76

involvement in the political environment during the 1960s and 1970s. As a result, the rightist violence that took place in the 1970s through the "Village Guard" system or "Uniformed Gangs" facilitated the putting of a military force in the south east of Turkey.[251]

Also, it is important to explore the military elite's interests the in economy especially as they had a semi authoritarian approach in Western Anatolia and an autocratic approach in the Kurdish community. The mixture of a capitalists and military interest in Turkey began in the 1950s and still ongoing was based on three related concerns. First, there was a rise in the activity of the left wing within the State's bureaucracy. Due to the high levels of inflation throughout the mid-1950s, the economy's public sector was proletarianised, and hence, many civil servants began associating themselves with political and socialist networks.[252] The second related concern was that there was a rise to 500% in unionization between 1948 and 1958.[253] This clearly was opposed to Kemal's prohibition on organizations established based on class, this started threatening the private sector's intake of the former state-led manufacturing sector. Lastly, the failure of Western Anatolian Capital led to the collapse of the Feudal Power of the South-east which escalated into another concern, the regional economic disparities which only intensified and got worse. For example, between 1950 and 1960 the fund from the Industrial Development Bank was directed towards 2/3 of the 401 projects based in the Marmara region only.[254] Thus, as a result of an unsteady and a divided underclass of unemployed persons, there was an increase in "social lines" in

[251]Berberoglu, E., *Süsürlük: Yermi Yıllık Domino Oyunu,* (Istanbul İletişim,1997).
[252]Karpat, K, "The Turkish Left," *Journal of Contemporary History 1*, (1966): 169-186
[253] Berberoğlu, B., *Turkey in Crisis,* (London, Zed Books,1982).
[254]Singer, M., *The Economic Advance of Turkey, 1938-1960,* (Ankara, Verso., 1977).

several Turkish cities, and this "came to be drawn along geographical differences," which in the 1950s, was approximately 50% of the urban work force.[255]

During the coup in the 1960s, concern among the military elite was on the increase and there was fear of possible threats to social disorder within the urban cities due to rise in taxation and fear of going back to the economic crisis of the interwar period. According to Nordlinger's model of high commands, which prefers and extension of middle class power when dealing with a high working class people, the Turkish military undertook procedures to develop the private sector and to draw itself nearer to the bourgeoisie class. In order to engage with these targets, the Army Mutual Assistance Association (AMAA) was established in 1961. The AMAA was formed by recruiting members of one land force as well as designing to provide social security or a guarantee to military personnel. In 1975 the AMAA supported over 19.000 homes, increased 35.000 personal loans and accumulated tax exemptions assets in surplus of 2 billion Turkish liras.[256] In 1996, the AMAA gained interests in highly capital intensive sectors of the economy, such as engaging with Lockheed for developing military aircraft and weapons manufacture; the Renault and Goodyear for automotive industries, as well as with Axa for processing and extracting stock speculation.[257] Since the AMAA was controlled by the military itself, the success of the association has placed the military elite at the top of the technological industrial manufacture as well as foreign capital exchange as Nordlinger points out the existence of such systems in other rogue regimes. The association affected the living standards of the officers' corps in order to secure their high command status linking to their internal constituency.

[255] Keyder, Ç., *State and Class in Turkey*, (London, Verso., 1987b).
[256] Vaner, 251.
[257] Şen, S., *Silahi Kuvvetler ve Modernizm*, (Istanbul, Sarmal, 1996).

The increasing role of the military elite within the corporate capitalist system caused the regime to receive complaints from the bourgeois for greater representation. This process of semi authoritarian incorporation served the military to regain their conventional status within the state by allowing the existence of middle class rule and practicing authority over the growing support of left wing reformism. The continuation of this process was only possible through by "continuously threatening intervention and by enlarging internal security networks via the National Intelligence Service (Milli Istihbarat Teskilati). All of this enabled the military elite to acquire veto power over policy decisions made by the government. The domination of NSC within the state allowed for a vivacious and unreactive spectrum to happen without political discussion granting or acknowledging the institutionalization of a full party democracy, as is the case generally with a policy of "negative integration". The military officers were already ruptured by the paradoxical nature of the Kemalist heritage, as they became exposed to political radicalization. This happened to be very crucial in the 1970s when the Labor turmoil escalated, "a general loss of confidence among sections of the bourgeoisie."[258] As a result of this, the martial law was declared by the NSC in 1978, and 19 provinces were placed under military administration, which consequently affected business confidence.[259]

Later in 1979, there was a toned to show the International Monetary Fund (IMF) that the administration was under civilian rule if they were to benefit from a rescue package of 1.5 billion dollars. As a result, the Chief of Staff Evren got rid of the civilian government in 1980 and sent General Sain Kaya to Washington to attain American

[258] Barkey, H., et al. *Crises of the Turkish Political Economy:1960-1980*, in A, Evin ed. Modern Turkey: Continuity and Change (Opladen: Leske Verlag and udrich Gmbh, 1984), 47-63.
[259] Berberoğlu, 119.

support. They also have hosted NATO commander General Rogers and got a guarantee of 182 million dollars from the World Bank.[260] Although the IMF's agenda was a serious concern in Turkey, during the1980s, there was a third military coup which again established a semi-authoritarian regime in a bid to neutralize the attempts of the left wing from establishing strong ties in Western Anatolia. In that respect, the regime widened martial law all over Turkey and in doing so, arrested many left-wing supporters in1981. By 1983, 39.529 persons had been jailed for an uncertain time.[261] The coup aimed as well to ban trade unions and their involvement political activities that could cause the rise of left-wing intellectualism in Turkey again. Pevsner opines that with the coup in 1980, the government clarified that the arrests consisted of about; 54% left activists, 25% unknown, 14% rightist and 7% made up of Kurdish separatists."[262] As a result of these arrests that occurred between 1980 and 1983, the regime established a new constitution which favored the military's political position and strengthened its authority over governmental institutions and interest group formation.[263] Moreover, the new institution provided by 628 additional regulations that forced into law between these years, "well narrowed structure…for the conduct of political participation by civilians"[264] Labour organizations were mainly the target areas, thus the new institutions applied restrictions to legal industrial action, while granting the NSC the power to delay any attack for nearly two months in ethics as well as in real life.[265] In addition to this, certain steps were taken; liberalization of

[260]Paul, J. "The Coup," *The Middle East Research and Information Projects Report,* 92 (1981), Washington DC.
[261] Hale W., *Turkish Politics and the Military* (London, Routledge, 1994).
[262] Pevsner L., *Turkey's Political Crisis: Background, Perspectives, Prospects* (New York, Praeger, 1984).
[263]Weiker W., "Constitution-Making for Turkey's Third Republic," *Turkic Culture: Continuity and Change*, Indiana University Press, (1987): 33-40.
[264]Özbudun E., "The Post-1980 Legal Framework for Interest Group Associations," in M. Heper ed., *Strong State and Economic Interest Groups: The Post-1989 Experience*, Berlin: Walter de Gruyter (1991): 41-54.
[265]Ibid.,54.

importation and promotion of exportation, debt management and monetary controls were fixed, a realistic exchange rate policy was adopted which strengthened the private sector's place relatively, and public spending rationalized in Turkey.[266]

Hence, creating a steady neo-liberal regime in Turkey's capitalistic regions that would not be disturbed by international disfavor and social turmoil was inclusive the target of the high command. Nevertheless, as Boratav observes, the hourly wages fell in 1985 from 1.11 dollars, from a previous average of 2.4 dollars, as the social outcome of these structural alterations.[267] The intimately allied military and capitalist elite admitted an immediate return to party policies with the aim to guarantee its place in the international command and to balance out civil opposition. On the 3rd of October 1980, Vehbi Koç, an influential person amongst Turkey's richest citizens notified Kenan Evren by a letter that Western countries and their establishments will not be trustworthy anymore and they will not keep their words in any case of financial postponement. [268] This prompted Evren to declare to change to go back to democracy two years before the planned date, This contributed in balancing out the concerns in the American congress, which then augmented grants and loans to 300 billion dollars in 1983 from 100 million dollars in 1979. [269] The creation of the Turkish-American Business Council in 1985, followed by yearly meetings of that council became the top

[266]Baysan T, et al. *Turkey's Trade Liberalisation in the 1980s and Prospects for its Sustainability.* T. Aricanli and D. Rodrik ed. The Political Economy of Turkey: Debt, Adjustment and Sustainability, (London: Macmilan, 1990), 9-36.
[267]Boratav Korkut, "Inter-Class Relations of Distribution under Structural Adjustment: Turkey during the 1980s'," in T. Aricanli and D. Rodrik ed. *The Political Economy of Turkey: Debt, Adjustment and Sustainability*, (London: Macmillan, 1990): 199-229.
[268] Arat Y., "Politics and Big Business: Janus-Faced Link to the State," in M.Heper ed., *Strong State and Economic Interest Groups: The Post-1989 Experience*, (Berlin: Walter de Gruyter, 1991): 135-148.
[269] Aricanli T, "The Political Economy of Turkey's External Debt: The Bearing of Exogenous Factors," in T. Aricanli and D. Rodrik eds., *The Political Economy of Turkey: Debt, Adjustment and Sustainability*, (London: Macmillan, 1990), 230-253.

two-sided event in Washington.[270] In fact, by the end of 1980, Turkey was ranked as the third after Israel and Egypt in receiving assistance from America. Economic support received accumulate to over 4 billion dollars till today.

Nevertheless, the military's provision went beyond 14 billion dollars. For instance, the compound yearly figure for grant aid supplies and sales of arms out of the United States went up to 912 million dollars from 339 million in 1984, after the military coup in 1980.[271] In 1985, A Defense Industry Support Fund (DISF) announced to cope with the huge costs of a such program, which was capital centered. The Fund (DISF) was hardly under Turkish bidding laws.[272] Regardless that the compound allotment for education and health was left behind by the defense ministry budget, the DISF that preliminarily got out of a 5% levy on income tax, got to a value of 1.5 billion dollars in 1991 by letting Turkey to become one of the foremost and number one purchaser of the United States, and hence, received a significant amount of military hardware from the US.[273] On the other hand, the profit gained from its enterprise interests got centralized of importance, particularly in the industry of domestic arms, guiding public to corporate with the private sector in order to build F-16 fighter planes. As previously mentioned with Lockheed, it sought to strengthen the ties between the military and economic elites and bring them closer.[274] Mann defines this "bifurcated" structure as subsistent and capitalist, and in a contemplation of that structure, the utilization of state restraint doubled by Turkey's especially militarized industrial growth. By facilitating

[270]Çandar C, "Some Turkish Perspectives on the United States and American Policy Toward Turkey," in M. Abramovitz ed. (New York: The Century Fund, 2000), 117-152.
[271]Federation of American Scientists, "Arms Sales Monitoring Project," last updated July 2002. http://fas.org.asmp/ (accessed July 28, 2016).
[272] Günlük-Şenesen G, "Some Economic Aspects of Turkish Armaments Spending," *New Perspectives on Turkey,* 13 (1995): 75-91.
[273] Aricanlı, 246.
[274]Karaosmanoğlu, 33.

social reformism in case of a hidden, property owning oligarchy, the high command modeled after Nordlinger's style of military elites in economic terms. A two-fold policy of compulsion and allurement disconnected the conventional power of provincial feudatories. Centralized networks of autocratic militarism partly substituted the power of landowners who were either disobedient or against the state. This was done through a system called "Village Guard" and more than 2000 villages were relocated.[275] The functions of state attached elites in the economy was enlarged by the continuing the South-East Anatolian Project (Guney Doğu Anadolu Projesi) which offered to build 21 dams and 19 hydroelectric power stations and a vast irrigation system across the south east region.[276] Furthermore, Aydınlı stresses that the provinces that were affected by the conflict were undergoing a rebuilding process with the army's initiative, after a decrease in violence.[277] On the other hand, the left wing ideology still existed in the regions where there was no emergency, in order to separate resistant actions and to encounter social legalization.[278] In addition to this process of military mobilization to create "negative integration", the Islamist Welfare Party (Refah Partisi) was forced into alliance with the economic elite.[279] In the meantime, through the state's new strategy of implanting a so called independent judiciary through a wide clarification of what represents "national security," the party was differentiated from its favorite ground, and this can be seen as a characteristic example of a semi-authoritarian model of Michael Mann. In that context, appreciable observance by the generals was required by such a strategy, and they were strict about discharging

[275]Mcdowall, 426.
[276]White P., "Economic Marginalisation of Turkey's Kurds: The Failed Promise of Modernisation and Reform," *Journal of Muslim Minority Affairs* 18 (1998): 139-158.
[277]Aydınlı E., "Between Security and Liberalisation: Decoding Turkey's Struggle with the PKK," *Security Dialogue* 33 (2002): 209-225.
[278]Laizer S., *Martyrs, Patriots and Traitors* (London: Zed Books, 1996).
[279]Cornell S., "Turkey: Return to Stability," *Middle Eastern Studies* 35 (1999): 209-234.

officers with indications of Islamist affinity.[280] So, the foundation of how the Turkish armed forces conceive Islam is the integration of a prudent exterior publicity and inner suppression as it is convenient in terms of personal decency and order, yet improper in terms of common sense or corporate consciousness as the dismissal of the Chief of Staff, Huseyin Kivrikoğlu in 1998 demonstrated.[281]

In this sense, it can be clearly observed that during these times there was military authority for decades in Turkey with very strict martial laws in order to prevent any rise from the left wing. It could also be seen later that the coup in 1960 allowed the military to get closer to the industrial elite. In the late 1980s and 1990s, civilian was incorporated into a military-industrial complex which was guarded by the military. However, there was a significant change in the regime system in Turkey when the AK-Party (Justice and Development Party) came in to power in 2002. Rabasa and Larrabee state that when the AKP came in to power in November of 2002, Erdogan declared economic stability as well as membership into the EU with its human rights approach rather than going back to Islamic roots as the priority of his government. By emphasizing a desire for membership as well as the public's support for EU membership, the AKP sought a democratic means for a democratic means of ruling the country.[282] The approach of the AKP changed the expectations of the public and opposition parties, who had previously believed that the AKP would go anti-West considering its Islamic state. On the contrary, the AKP's approach towards the West and the EU was seen as an important ideological shift. This ideological shift was

[280]Ayata S., *The Rise of Islamic Fundamentalism and its Institutional Framework.* in A, Eralp M. Tünay and B. Yeşilada eds. (London: Praeger, 1993), 51-68.
[281]Shankland D., "Religion" in B. Beeley ed. Turkish Transformation: New Century New Challenges (Huntingdon: The Eothen Press 2002): 78-98.
[282] Rabasa Angel, Larrabee F. Stephen, *The Rise of Political Islam in Turkey* (the RAND Corporation, Press, 2008).

emphasized by Rabasa and Larrabee, that considering its Islamic roots, the AKP strongly supported democracy, respect for human rights and a western led system of rule of law. EU membership was seen as a means of decreasing the influence of the military and promoting a new political agenda which excluded military involvement, as well as establishing a political framework that widened religious tolerance in the country.[283] As was previously mentioned, the military had always played a decisive role in shaping the political discourse of Turkey since 1923, either behind the curtains or through direct control over the government as was the case in 1960, 1971, 1980 and 1997 with the military coups. However, the power of the military over the civilian government changed after 2002 when the AK-party came to power. The EU accession demands clearly meant an establishment of new political reforms, civilian supremacy and a decrease in the role of the military in politics in Turkey. In addition, with the EU requirements, the AK Party sought to reduce military representation in the civilian government. It also brought transparency to the military's defense policies which the military had to accept.[284] An example can be seen when Haugom stated that EU membership was an important step for Turkey to become a strong democratic country with a modern army. These reforms were also accepted by the general staff, although it meant the military would lose parts of its political influence.[285] This decrease in the military's influence can also be observed in Ahmet Davutoglu's "Strategic Depth," wherein he opined for a disengagement from the Kemalist approach, the idea of military authoritarianism as well as detachment from the Islamic world. He stressed that it was important for Turkey to strengthen its ties with Middle Eastern neighbors that would pursue a more open Islamic domestic identity like Turkey. Davutoglu also

[283] Ibid., 47.
[284]Sarigil Zeki, "Civil-Military Relations Beyond Dichotomy," *Turkish Studies* 12 (2011):265-278.
[285]Haugom Lars, "The Turkish Armed Forces in Politics, *"Norwegian Institute for Defense Studies* (2012): 1-11.

emphasized that the establishment of strong ties in the region could not be achieved through a military approach, but, it could only be possible through the expertise of diplomats, politicians and government officials.[286] In this respect these reformist developments can be seen as a more general shift from the military approach to a more democratic approach in Turkey. The Turkish government under the AKP also made an important change in the NCS. Previously, the military had executive power over decision making, yet Erdogan turned the NSC into a more civilian decision making process with the military only occupying an advisory role in the council.[287] Similarly, in Esen and Gümüşcü's work it is stated that with these reforms in the new government, the AKP sought to reduce the military's role in politics by implementing legal reforms that decreased the constitutional power of the military, and its direct role in decision making. Erdogan also implemented a system wherein such military interventions in the political environment were criminalized, thus it bringing to an end the military's large intervention in politics.[288] Also, the fear that the military might pose a threat to political activities pushed the government to replace General Yaşar Büyükanıt with General Hilmi Özkök,who was believed to have Islamist sympathies. Büyükanıt gave a speech in September 2016, declaring that it was the duty of the army rather than domestic politics to protect fundamental principles of the country. In addition to this, Büyükanıt carried on threatening the current establishment by arguing that Turkey should be a more democratic and secular unitary state and therefore there was no need to change this secular path, which was started by Atatürk[289] This could

[286]Danforth Nicholas, "Ideology and Pragmatism In Turkish Foreign Policy: From Ataturk to the AKP," *Turkish Policy Quarterly* 7, 3 (008): 84-95.
[287] Rabasa, Larrabee, 69.
[288] Esen B and Gumuscu S., "Rising Competitive Authoritarianism in Turkey," *Third World Quarterly* (2016): 1-26.
[289]Jenkins G., "Prospects for Civil-Military Relations in Turkey," *International Affairs* 83, 2 (2007): 339-355.

be interpreted as a threat from Büyükanıt to the AKP, and was a desperate attempt by the military to gain its power back and stronger say in governmental decisions.

In 2007, there was a concrete "pushback" from the AK party in the cases of Ergenekon and Balyoz (Sledgehammer). In these two cases, the AK party succeeded in bringing high ranking military personnels both on duty and retired before a court on the grounds that they were secretly facilitating violent operations in an attempt to overthrow the government.[290] These cases clearly showed that the Turkish military was no longer immune neither where they above authority any longer. This change in system also signified that there was only one authority, which was the government.[291] Furthermore, the elections in 2007 strengthened the AK party's authority in the region and with the arrests of the suspected officers, the military decided not to go against Abdullah Gül's presidency. This gradually eroded the military's autonomy and introduced more developments in the civilian-military relationship.[292]

Günsoy also emphasizes that the AK party government also eliminated the Public Security Cooperation Protocol-EMASYA (Emniyet Asayiş Yardimlaşma Protokolü), which provided a legal ground for the military to intervene in internal security operations. In order to stop the military's intervention through EMASYA, the government introduced a constitutional package that was voted by the majority of the constituent body in a referendum. This constitutive package had several changes, and the most significant one was that military personnel could be dismissed from civilian courts for non-military cases. Hence, with these legal changes there was an increase in

[290]Aydinli Ersel, "Turkey's AKP in Power," *Journal of Democracy* 23, 1 (2012):100-108.
[291]Kuru Ahmet, "The Rise and Fall of Military Tutelage in Turkey: Fears of Islamism, Kurdism, and Communism," *Insight Turkey* 14 (2012): 37-57.
[292]Walker J. and Cizre U., "Conceiving the New Turkey after Ergenekon," The International Spectator 45, 1 (2010): 89-98.

civilian support against the military's autonomy which had been in practice. Consequently, the government under the 'AKP's authority had an important say in the decisions of the High Military Council for the first time after a period of more than 20 years.[293] The elimination of the military's autonomy and decision making power as well as an increase in civilian support towards the non-military system could be interpreted as the democratic integration of Turkey.

However, the negative attitude in Europe towards Turkey's membership in EU changed public support in Turkey towards EU accession. Where as in 2004, 74 % of the population supported EU accession; by 2006 it had dropped to 54% and a further drop to 40% by 2007.[294] According to this same report, 56 % of Europeans thought it likely that Turkey would join the EU, yet only 26 % of the Turkish public agreed with this.[295] In addition to this, unresolved Kurdish terrorists attacks against Turkey, the Cyprus settlement issue as well as the reforms in Turkey to reduce the military's authority remained as strong obstacles to Turkey's EU membership. [296]

Since 2002, although, the AK party led government considers itself as a conservative party with Muslim democrats, it can instead be seen that Turkey has not ended up in democratic integration; rather, the AK party government has become increasingly authoritarian. This authoritarianism is justified in in Abramowits and Barkley's work as they argue that the EU's membership requirements are largely an opportunity for

[293]Gürsoy Y., "The changing role of the military in Turkish Politics: democratization through coup plots?" *Democratization* 19 (2012): 735-760.

[294]Translantic Key Findings 2007, The German Marshall Fund of the United States, Washington D.C. (2007): 1-28.

[295] Ibid., p.22.

[296]Rabasa, Larrabee, 80.

the reforms that the government made to abolish the military. To them, the AKP is seeking to turn the country in to an authoritarian regime with an Islamist approach in order to guarantee its place in the Muslim world, without consideration of their alliances in the international community.[297] The Islamist roots of the party goes back to the early 1990s, where young Erdogan was an Islamist politician in Istanbul. He later on went on to be mayor of the city of Istanbul, and was the head of an Islamist party until 1998 when the military coup in Turkey defeated the party. However, AKP came in to power in 2002; there was renewed hope on the part of the Islamists. Although the party followed democratic approach at the beginning, Erdogan's promotion of Islamism started in the education system which brought a "new religious generation" and a freer open religious state.[298]

The new government tried to find ways to regulate "Imam Hatip" school graduates to be able to transfer to state schools before graduation. As a result, the ministry of Education forced a law to allow Imam Hatip students to get degrees from state schools.[299] Although this change was not appreciated by secularists and was perceived as a spread of Islamism, the AKP led government and its supporters described this change as; "removing intolerance against Imam Hatip schools.'[300]

[297]Abramowitz M. and Barkey H. J., "Turkey's Transformers: The AKP Sees Big," *Foreign Affairs* 88, 6 (2009): 118-128.

[298]Fradkin H. and Libby L., "Erdogan's Grand Vision: Rise and Decline," *Word Affairs* 175, 6 (2013): 41-50.

[299]Cagaptay S., *How Will the Turkish Military React?* (Madrid: Real Instituto Elcano 2007).

[300]Toprak B. and Carkoglu A., *Degisen Turkiyede Din, Toplum ve Siyaset* (Istanbul: TESEV 2006).

Another Islamist approach which the AK party adopted was after the huge success in the 2007 presidential elections, after which the AKP focused on integrating power.[301] The AKP gained control of the highest level of government authority when it acquired the position of president. The Erdogan led government also tried to lift "the headscarf ban" for women when entering universities, and later in 2008, the AKP dominated parliament amended Article 10 that; "everyone is equal before the law without distinction as to language…religion and sect, on any such grounds" and Article 42 specifies, "no one shall be deprived of the right of education and the right of education shall be defined and regulated by law."[302] Although the amendments of these two Articles did not directly mention any in the lifting of the headscarf ban, it held that everyone should be treated equally irrespective of their religion.

Moreover, another instance of authoritarianism was Erdogan's crackdown on mainstream media when criticism over the AKP's policies increased. he did this by putting the media under his control. First, the second largest media group Sabah, the ATV newspaper and the Turkish TV channel were auctioned to the Çalık energy company, which is run by Berat Albayrak, Erdogan's son-in-law. Later, Albayrak also tok over control over the Takvim and Fotomaç newspapers.[303] Also, after the levying allegations against the AKP, Erdogan took on Turkey's biggest media group Dogan Media (DMG). The news agency had claimed that figures close to Erdogan and the AKP were siphoning millions meant for charities to fund pro-AKP outlets in

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[301]Cornell Svante, et. Al. *Turkey Transformed: The Origins and Evolution of Authoritarianism and Islamization under the AKP*, (Washington D.C.: Bipartisan Policy Centre, 2015), 1-96.

[302]Constitution of the Republic of Turkey, *Rules of Procedure of the Grand National Assembly of Turkey*, 1-108 (Accessed on 2 August 2016) https://global.tbmm.gov.tr/docs/constitution_en.pdf

[303]Sözcü Newspaper, "Benim Damadim Isini Bilir," updated on April 12, 2013. (Accessed on 2 August 2016) http://www.sozcu.com.tr/2013/ekonomi/benim-damadim-isini-bilir-268168/

Turkey.[304] Erdogan retaliated by encouraging his supporters to all newspapers and television stations that were owned by DMG.[305] Turkish tax authorities also fined Aydin's DMG a record 4 billion dollars. As a result of this crackdown on the media, Reporters without Borders, ranked Turkey 122nd out of 175 countries in a press freedom index. Additionally, it is stated that this is an attempt by Erdogan and his governments to bring down the secular media elite as he previously did with the military.[306]

On June 12th 2011, the AKP won 327 of the parliamentary seats with 49.9 percent of the total votes. The importing point to note is that the party's total vote increased in this election permitting the AKP to have a percentage high enough to pass laws without support from the other parties and could as well form a new constitution.[307] As a consequence, there were increased worries among liberal and secular groups which culminated into Kılıçdaroğlu leader of the Republican People's Party's (CHP) to stress that there was a "growing authoritarianism under the AKP government."[308] Similarly, other scholars believe that Erdogan's overcome of the republican system with the 2010 referendum, and his parliamentary success in 2011, signaled intentions of going to proclaim a new constitution considering his presidential elections in 2014. In this regard, there is a wide sense of possibility that the AK-party with Erdogan will try to

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[304]Cornnell Svante, Knaus Gerald and Scheich Manfred, "Dealing with a Rising Power: Turkey's Transformation and its Implications for the EU," *Centre for European Studies (2012):* 2-124.

[305] Ibid., p.26.

[306]Zacharia Janine, "As Turkey looks to West, trial highlights lagging press freedom," *The Washington Post*, 5 July 2010, 1,2.

[307]Başkan F. and Güney A., "Election Report and Political Analysis Turkey's June 2011 Parliamentary Elections," *Journal of Balkan and Near Eastern Studies* 14, 1 (2012): 165-174.

[308]Ibid., p.166.

seek if a presidential or semi presidential system can replace the current parliamentary system.[309]

In 2011, it important steps were taken in the direction of nuclear energy under the decree in the power of the law. A decree in the power of law is defined by Kumarcıbaşı's as a scenario where the Grand National Assembly (TGNA) may give an authority to the Council of Ministers to issue decrees without consulting parliament, with the President's signature the only requirement. In addition to this, the AKP has an overall majority in TGNA, which makes it easier for Erdogan to set his authoritarian regime and leadership over the government.[310] Within the concept of the decree in the power of law, amendments were made in Article 10, which specified that, the work that should be done under the ministry of energy and natural resources.[311] In this regard, it is very likely that anything related to nuclear energy in Turkey will be decided by the AKp, and most likely by Erdogan since he has maximized power and kept everything under his control. This will be further explained under the section; "Nuclear Policy in Turkey."

The Gezi Park demonstration of 2013, was again illustrated the authoritarian nature of the AKP led government While thousands of civilians were under attack by the police; newspapers reported that Erdogan was having meetings in Tunisia and Baku. Erdogan

[309]Esen B. and Ciddi S., "Turkey's 2011 Elections: An Emerging Dominant Party System?" *Meria Journal* 15,3 (2011): 1,13.

[310]Kumarcıbaşı A. C. *Dilemmas of Institutionalization and Leadership Strategy* (London and New York, Taylor&Francis, 2010).

[311]Enerjji ve Tabi Kaynaklar Bakanlığının Teşkilat ve Görevleri Hakkında Kanun, (Accessed on 27 July 2016) Available at: http://www.mevzuat.gov.tr/MevzuatMetin/1.5.3154.pdf.

did not take the Gezi Park demonstration seriously as he declared that; "the nation is the party and the party is the nation."[312]

In August of 2014, Erdogan achieved his ambition of becoming president through popular elections. By becoming President, this signaled a one-man leadership and authoritarianism which has been defined as "Turkish style Presidential system". Erdogan himself declared the system as one with limited checks and balances.[313] Similarly, Erdogan's crave to have complete authority was also emphasized by the author Yeşilada, especially as no one within the AKP ruling party was willing to challenge or confront Erdogan's decisions. Although Erdogan failed to gain the necessary 330 votes to change the constitution, his loyal followers made it clear that the president will be the one calling the shots for the government with or without such change through a referendum.[314] In addition to this, the prominent author Yavuz argues that "For Erdogan, party politics is about loyalty and obedience to the leader"[315] In this concept, scholars like Göreners and Ucal discuss that "such leaders tend to dominate decision making, preferring to organize a centralized decision making structure that situates them self at the top.[316] Lastly, Erdogan's personalistic authority can be seen when he made a public speech in Rize;

[312]Berlinski C., "The Gezi Diaries: Can We Still Call Turkey Civilized?" *The Tower Magazine*, July 2013, 1-15.

[313] Boyunzsuz S. Ö., "The AKP's Proposal for a Turkish Type of Presidentalism in Comparative Context" *Turkish Studies* 17, 1 (2016):68-90.

[314] Yesiada B. A., " The Future of Erdogan and the AKP," *Turkish Studies* 17, 1 (2016):19-30.

[315] Yavuz Hakan, *Secularism and Muslim Democracy in Turkey* (Cambridege: Cambridge University Press, 2009).

[316]Görener A. Ş. And Uçal M. Ş., "The Personality and Leadership of Recep Tayyip Erdogan: Implications for Turkish Foreign Policy" *Turkish Studies* 12, 3 (2011): 357-381.

> There is a president with de facto power in the country, not a symbolic one. The President should conduct his duties for the nation directly, but within his authority. Whether one accepts it or not, Turkey's administrative system has changed. Now what should be done is to update this de facto situation in the legal framework of the consultation.[317]

From this point of view Erdogan openly and publicly declare his personalistic authority above the government. This also means that the Turkish Constitution no longer existed because of Erdogans defacto power, as he maintained that the president was not made for the constitution, rather the constitution must be made for the president.

4.4 The Politics of Nuclear Energy in Turkey

In order to understand why Turkey is keeping the nuclear option on the table as a powerful changer and of vital national interest, one needs to understand the dynamics of the demands of the country and its nuclear policy. According to the Environment and Urban Planning Minister, Fatma Guldemet Sari's statement in the Daily Sabah newspaper, Turkey needs to install nuclear power plants immediately to decrease its foreign energy sources dependency and to become a free independent state.[318] Based on the need of nuclear energy in Turkey, significant steps have been taken in the field of nuclear energy by the Justice and Development Party (JDP-AKP) under Recep Tayyip Erdogan, with the signing of the Akkuyu nuclear power plant agreement with the Russian Federation. One important reason why Turkey went for the nuclear power option is because Turkey sees it as a solution to its gas and electricity dependency on Russia.[319]

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[317]Akyol Mustafa, "Now Erdogan is cooking up a coup to overthrow himself," *Almonitor Turkey Pulse*, updated on August 18, 2015. (Accessed on 3 August 2016) http://www.al-monitor.com/pulse/originals/2015/08/turkey-erdogan-is-blamed-for-coup-after-elections.html

[318]Daily Sabah, "Turkey needs nuclear power plants and renewable energy," Turkuvaz Communication and Publication Corporation, 1 January 2016, 1, 3.

[319] Jenkins Gareth, "AKP Pushes Ahead with Nuclear Power Render," The Jamestown Foundation, September 23, 2008. http://www.jamestown.org/single/?tx_ttnews%5Btt_news%5D=33963&no_cache=1#.V53F9Gh9601 (accessed July 31, 2016).

Uslu opines that import in the energy consumption permanently increases every year and in the case of Turkey, installing nuclear power plants will reduce this dependency on energy to 23.5%, which indicates that nuclear energy can be the primary source of energy and thereby decrease dependency on foreign energy sources.[320] In addition to this, several scholars also put Turkey's nuclear energy policy agenda as; to diversify energy sources and to avoid dependence on energy imports from a single source or country, and hence, overcome this dependency by introducing nuclear power to the country.[321] Ozertem also notes that during the elections in 2011, prominent political parties such as the AKP, CHP and MHP argued that nuclear energy has an important role in producing electricity to meet the energy demands in the country.[322]

Seeing as Turkey has decided to embark on a policy of nuclear energy, it would be wise to look at the laws on nuclear energy existing in the country. The Turkish government enacted law 5710 on "Establishment and Operation of Nuclear Power Plant with Energy for the sale of law," on 9 November 2007. 5710 indicates the purpose of the proper energy planning and policy. In addition to this, it also identifies the procedures that should be taken by the ministry of Energy and Natural Resources (MENR) and TAEK. It is also important to mention that the law also provides information on licenses, permits and obligations regarding the facilitation of the nuclear power plants in Turkey. In this regard, MENR is the main body of the Turkish

[320]Uslu T., "The Necessity of Nuclear-Based Energy Production for Turkey," *Energy Sources, Part B: Economics, Planning, and Policy* 5, 2 (2010): 155-164.

[321]Ozturk M., Bezir N.C. and Ozek N., "Turkey's Energy Production, Consumption, and Policies until 2020," *Energy Sources, Part B: Economics, Planning, and Policy* 4, 3 (2009): 315-331.

[322] Ozertem H. S., "Fukusima Sonrasi Turkiyede Nukleer Enerji Politikalari," *Tartisma Platformu* 7 Rev. (2011): 157-160.

Energy sector. It is clearly responsible for the preparation and the implementation of energy plans, policies and programmes.[323]

On the other hand, according to TAEK's law 2690, nuclear energy will be used only for peaceful purposes and for the benefit of the country to provide a stable energy policy. Furthermore, TAEK under the prime ministry also specifies the duties, authorization and the responsible organs for the nuclear areas. It also indicates the decrees on the protection environment and nuclear facilities.[324] Apart from these two laws and the decrees and amendments on transportation of nuclear materials, there are still uncertainties in terms of fuel cycle, decommission and insurance. These doubts are also claimed to be the main problems in Turkey preventing it from having a complete nuclear energy policy.[325] Consequently, TAEK is responsible for determining national policy regarding the peaceful use of atomic energy. It is also responsible for establishing research and training centers, laboratories… for educating the personnel, collaborating with universities and organizations as well as enlightening the public.[326]

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[323]The Grand National Assembly, "Nükleer Güç Santralarının Kurulması ve İşletilmesi ile Enerji Satışına İlişkin Kanun, Kanun:5710" ratified 20 November 2007. (Accessed on 25 July 2016) https://www.tbmm.gov.tr/develop/owa/kanunlar_sd.durumu?kanun_no=5710

[324]Turkish Atomic Agency Authority, "TAEK Kanunu 2690," ratified 13 July 1982. (Accessed on 5 July 2016) http://www.taek.gov.tr/belgeler-formlar/mevzuat/kanunlar/TAEK-Kanunu/

[325]Sirin S. M., "Serbest Elektrik Piyasalari ve Nükleer Enerji:Birleşik kralık'tan Türkiye için Dersler" TSRF Conferences on Nuclear and Renewable Energy (2009).

[326]Sari S., "Country Nuclear Power Profiles: Turkey," IAEA, updated 2014. (Accessed on 26 July 2016) http://www-pub.iaea.org/MTCD/Publications/PDF/CNPP2014_CD/countryprofiles/Turkey/Turkey.htm

Turkey's history in the nuclear dates back to the 1950s and it has always supported the usage of peaceful nuclear energy consumption. In this light, Turkey has always been a signatory to the NPT safeguard agreements with the IAEA and additional Protocols.

In order to support the idea of Turkey's ambition in using nuclear energy for the benefit of the country, the Turkish government signed a; treaty banning nuclear weapons tests in the atmosphere, in outer space and under water (1963), a comprehensive nuclear test ban treaty (CNTBT), Nuclear Suppliers Group (NSG), Missile Technology Control Regime (MTCR) and Biological Weapons Convention.[327] In addition to this, for export controls on conventional arms it is a signatory to the Wassenaar Arrangement and the global Arms Trade Treaty.[328] It goes without saying that Turkey has signed a number of international, multilateral and bilateral agreements throughout the years as well as provided regulations, guidance and documents to prove its sincerity in peaceful nuclear energy facilitation. One should also note that in addition to Turkey's nuclear policy, Kibaroglu in his report under Edam asserts that besides Turkey's membership to international treaties for the proper implementation of its legal obligations, Turkey also has a set of measures to fight against nuclear smuggling. Kibaroglu suggests that the first set of measures taken was to establish "the inter-agency cooperation" within the state and other countries by also providing education and training in the field.[329] Morover, Kibaroglu also states that Turkey's partnership in the Global Initiative to Combat Nuclear Terrorism (GICNT) and its participation in

[327]Ibid., p.27-28-29.

[328] Perkovich G and Ulgen S., p.134.

[329]Kibaroglu Mustafa, "Nuclear Security and Turkey Dealing with Nuclear Smuggling," in *Nuclear Security A Turkish Perspective* EDAM (2015).

the Proliferation Security initiative (PSI) also prove that Turkey is against nuclear smuggling, and supports the non-usage of HEU and plutonium for producing weapons of mass destruction.[330]

The majority of the states in the Middle East region have also showed interest in developing nuclear technologies in order to meet the region's increasing demands for electricity. However, the Middle East region has always been considered as a potential threat to nuclear non-proliferation due to the unstable nature of the reason. In order to overcome this issue of instability from security perspectives in the region, Turkey seeks to establish deeper relations regarding its energy demands with its neighbors such as Syria and Iraq, under the "zero problems" with the neighbors' policy.[331] To that end, Turkey and Syria declared that they will establish strong ties in energy matters as minister of Oil, Sufian Alao reported in 2008: "We could also enter in the nuclear field, I spoke to Mr. Hilmi Güler (previous Turkish energy minister) on cooperation. In the future, we could join nuclear power plants for electricity production."[332] On the other hand, the AK party and Turkish government have always preferred to avoid criticizing Iran and its nuclear activities, especially regarding its development and acquirement of nuclear weapons. One reason is that Iran provides huge amounts of natural gas to Turkey, and another reason is the AKP led Turkish government's desire to be the regional player in the region without having zero problems with its neighbors.

[330]Kibaroglu., 88.

[331]Lorenz T. and Kidd J., "Turkey and Multilateral Nuclear Approaches in the Middle East," *The Nonproliferation Review* 17, 3 (2010): 513-530.

[332]Haaretz, "Report: Turkey and Syria Consider Joint Nuclear Energy Project," June 13, 2008. (Accessed on 23 July 2016) http://www.haaretz.com/news/report-turkey-and-syria-consider-joint-nuclear-energy-project-1.247770

As previously mentioned, Turkey under the AKP turned its path to the Middle East in a bid to improve its relationship with other Muslim countries as the current government especially as the current government is Islamist[333] Larrabee explains that the main aim of the AK-party is to take an important role due to Turkey's strategic location and control of the Bosporus.[334] As a result, one of AKP led government's aims concerning its domestic missile defense program was to invest a billion dollars into the development of low and medium altitude missile defense system; ASELSAN in 2011.[335] Kibaroglu also clarifies that Turkey's current missile capability is relatively small and limited to short range rockets, and the agreement with Lockheed in 1996, Turkey purchased 72 MGM-140A surface missiles.[336] Also, it should be noted that Iran's nuclear weapons ambitions and approach have always been a concern for Erdogan and Turkey's nuclear weapons ambitions. In this light, Erdogan declared that; "I'm afraid some people may accuse us of having ambitions for producing weapons of mass destruction, too". Ozdag declared as well that "Turkey will not accept living side by side with an Iran possessing nuclear weapons for a long period of time, and it will produce nuclear weapons to achieve to live with an Iran whose self-confidence has excessively mounted."[337]

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[333]Jenkins Gareth, "Is Turkey Playing a Regional Role at Last?" *Eurosia Daily* Monitor 5 (2008).

[334]Larrabee F. S., "Turkey's New Geopolitics," *Survival: Global Politics and Strategy* 52 (2010).

[335] Bekdil E. Burak and Enginsoy U., "Aselsan Wins $1B Turkish Air Defense Contract," Defense News, 23 June 2011.

[336]Kibaroglu Mustafa, "Turkey and Nuclear Weapons: Can This Be Real?" in Turkey's Nuclear Future, United Book Press (2015).

[337] Kibaroglu M. and Caglar B., "Implications of A Nuclear Iran for Turkey," *Middle East Policy* 15, 4 (2008): 59-80.

Some scholars are still skeptical towards Turkey's claims of wanting nuclear energy only for peaceful purposes. Miller and Sagan have posited that "when a state seems motivated to acquire nuclear weapons, a nuclear power program in that state can appear to be simply a route leading to the bomb or a public annex to a secret bomb."[338] Although, it has been emphasized by many scholars that Turkey seeks for peaceful energy and its policies dwell on that, there are still concerns that in case Iran achieves its nuclear weapons ambitions, Turkey might be tempted to start its own nuclear weapon program in order to balance and keep its power in the region. Retired Turkish General Armagan Kuloglu's statement can be interpreted as evidence of this;

> We have a competition with Iran; we don't want to pass to regional control to Iran. And also if Iran has more power than Turkey, It's a danger for Turkey… But if Iran has such kind of weapon, in this case for creating the balance, Turkey needs nuclear weapons also, because otherwise Iran will be a very dangerous country in the region for Turkey and the free world also.[339]

In this sense, it seems very likely that Turkey might seriously consider to acquire or later to switch its nuclear facilities into military purposes. There has been ana debate within the AKP that, Iranian proliferation could induce the development of a Turkish nuclear program. Nevertheless, historical trends indicate that Ankara is less inclined to adopt this option, and would only consider this as an option when all other alternatives are worn out.[340] Eksi also argues that, the AK party has a strong ambition to make Turkey a regional power, and in order to gain this status it will facilitate its nuclear power plants first then will later use it to obtain nuclear weapons and therefore

[338]Miller E. Steven and Sagan D. Scott, "Nuclear Power Without Nuclear Proliferation*?" The American Academy of Arts and Sciences*, Daedalus (2009): 7-18.

[339]Jones Dorian, "More Nuclear Power at the Black Sea?" *Quantra.de* (2006) https://en.qantara.de/content/turkeys-nuclear-ambitions-more-nuclear-power-at-the-black-sea

[340]Larrabee S. F., "Turkey as a U.S. Security Partner," *RAND Corporation*, (2008) (Accessed on: 29 July 2016) http://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG694.pdf

achieve its purpose of being a strong nuclear power in the region. This he claims is the AKP's secret agenda nuclear power strategy.[341] As Erdogan has stated; "if it is necessary to enrich Uranium for nuclear energy we will enrich it."[342] In this regard, it would be wise to take into consideration if Turkey under Erdogan's rule, could one day use HEU to produce nuclear weapons. According to some scholars, Turkey does not have the advanced technology to produce nuclear weapons nor the relevant infrastructure to enrich uranium and reprocess nuclear spent fuel. Even, if Tukey chooses the option to go nuclear, this could not be achieved any time soon as it would take lots of time, research and investments to expect fruition. Not also forgetting the fact that the Turks have no local capabilities to fabricate nuclear missiles.[343] However, Ulgen asserts that Russian designed low water reactors are technically capable of operating first generation nuclear weapons, if the leadership in this case Erdogan is willing to go ahead with uranium enrichment. In such a scenario, Turkish physicists would have to start by designing a "gun type" device.[344] He carries on by specifying that the "gun type" bomb is by far the easiest weapon to build by enriching 80 % of HEU and combining it with gun barrels in order to start to a nuclear chain reaction for nuclear explosions.[345] The scholars Gillinsky, Miller and Hubbord also argue that from a nonproliferation point of view, the Russian VVER-1200s light water reactors are not ideally fit for the production of the gun type nuclear weapons. However, their diversion

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[341]Eksi Muharrem, "Turkey's Nuclear Energy Strategy: The Ideal of Becoming a Major Power," in *International Energy and Security Congress*, Proceeding Book, 1 (2014): 69-100

[342]Haber Turk, "Biz de Uranyum Zengislestirecegiz," updated 21 May 2010. (Accessed on 21 July 2016) http://www.haberturk.com/gundem/haber/516636-biz-de-uranyum-zenginlestirecegiz

[343] Barkey J. Henri, "Turkey's Perspective on Nuclear Weapons and Disarmament*," Nuclear Security Series* 6 (2009): 67-81.

[344]Ulgen Sinan, "Turkey and The Bomb," Carnegie Europe, *Nuclear Policy* (2012): 1-24.

[345]Ibid., p.19

for this purpose is not entirely impossible.[346] As was discussed earlier in chapter two, given Turkey's uranium reserves, it would only need a leader willing to use this for military purposes for such a project to start.

As of today, Turkey and Iran seem to have found a way to strengthen their ties. This was evident as the deputy Energy Minister of Iran; Hushang Falahatiyan declared that Iran will sign a 3-billion-dollar worth deal with Turkish companies to develop a nuclear power plant in the Islamic Republic.[347] After giving overview of government types change in Turkey and its Nuclear Policy, chapter 5 offers a broad literature review of strategic (military) culture theory as well as its evolution since the 1950s. It ascertains key elements of Turkish strategic (military) culture which can best explain the state's quest for a nuclear program. Chapter 5 also contains the interviews from the international experts in the nuclear field and academicians to seek for answers regarding Turkey's nuclear ambition.

[346]Gillinsky Victor, Miller Marvin and Hubbord H. "A Fresh Examination of the Proliferation Dangers of Light Water Reactors," *Nonproliferation Policy Education Center*, (2004): 1-62.
[347]M.E., "Iran to award power plant to deal to Turkey," Pars Today, June 1 2016. (Accessed on 15 July 2016) http://parstoday.com/en/news/iran-i13975-iran_to_award_power_plant_deal_to_turkey

Chapter 5

STRATEGIC CULTURE MODEL

> The revolution, fanned by foreign intrigue in our Eastern provinces has lasted for five years, but today it loses half of its strength. Only the Turkish nation is entitled to claim ethnic and national rights in this country. No other element has any such right.[348]
>
> Ismet Inonu Pasha (The Turkish Prime Minister, 1930)

5.1 Key Elements of the Turkish Strategic Culture

How can one define Strategic culture?

It is the analysis of a particular actor's security and defense policy. Colin Grey in his writing talks about "the context within which states form security policies." Strategic culture is a number of shared common beliefs, norms and ideas within a given society. A community's security and defense identity, explained through its preferences and behavioral patterns, derived from shared experiences and accepted narratives specific to a particular security community.[349]

[348]Templar Marcus A., "Turkey: Conceptual Framework. İdeology, Strategic Culture and National Security," Hellenic News (2015): 1-100.

[349]Biehl Heiko, Giegerich Bastian and Jonas Alexandra, *Strategic Cultures in Europe* (Germany, Springer, 2013)

Turkey is geographically seen as a natural bridge between Europe and Asia. Turkey, in security terms, is described as a buffer between the European and the Middle Eastern regions, separating regional dynamics from each other.[350]

Karaosmanoglu states that elements of Turkey's strategic security culture continued to dominate across historical periods while being influenced by internal and external factors.[351] Turkey's security culture evolved across consecutive periods into the post-cold war era displaying a security culture of realpolitik which evolved over centuries from a dominant offensive to a dominant defensive character.[352]

5.2 The Turkish Strategic Realpolitik Culture

Looking at how Turkey's strategic culture has been developed until today, one finds the key characteristics around the end of the 17th Century. The Ottoman policy defined as offensive realpolitik[353], meant that the objective was to gain maximum power through land control, population control and wealth. Following the Treaty of Karlowitz in 1699, the military balance between the Ottoman Empire and the European powers shifted at the expense of the Ottomans. As a consequence, realpolitik began acquiring a defensive character,[354] and this impacted on the decision not to expand Ottoman influence but rather to slowly retreat to the East. This policy was supported by the major European powers who wanted to avoid creating a power gap in the Near East

[350] Buzan Barry and Diez Thomas, "The European Union and Turkey," Survival 41, 1 (1999):41-57.

[351] Karaosmanoglu Ali, "The Evolution of the National Security Culture and the Military in Turkey," Journal of International Affairs 54, 1 (2000): 199-216.

[352]Ibid., p.200.

[353] For offensive and defensive realism, see Benjamin Frankel, "Restating the Realist An Introduction," in Benjamin Frankel, ed., Realism: Restatements and Renewal (London: Frank Cass, 1996)

[354]Mufti M., "Daring and Caution in Turkish Foreign Policy" Middle East Journal 52, 1 (1998): 32-50.

through an abrupt collapse of the Ottoman Empire. Throughout the 19th century, the Ottoman Empire gradually saw its influence reduce while its dependency on the Western powers increased, as it was fighting two major empires seeking military expansion: Austria and Russia.[355]

From the early 19th century until the 1950's, during a period of 150 years, Turkey's security culture was dominated by an obsession of losing territories as well as fear of isolation. These combined, led Turkey to bargain with the European powers over territories at the time of the signing of the treaty of Sevres which increased the feeling of loss especially as the post WWI treaty actually consecrated the partition of the Ottoman territories. The Sevres treaty till date is seen by large groups as the external world conspiring to weaken and divide up Turkey.[356] To this day, these fears continue to haunt the elite and public opinion, despite the fact that, Turkey joined NATO in 1952.

Turkey's entry into NATO was an indication that Turkey accepted the values of the West. Turkish alignment with the West was not only limited to diplomatic or strategic considerations but as Bernard Lewis pointed out "it is the outward expression of a profound internal change extending over a century and a half of Turkish history and sustain attempt to endow the Turkish people with those freedoms, economic, political and intellectual, which represents the best that our western societies have to offer."

[355] Roderic H. Davison, "Ottoman Diplomacy and its Legacy," in L. Carl Brown, ed., Imperial Legacy: The Ottoman Imprint on the Balkans and the Middle East (New York: Columbia University Press, 1996) p. 176.

[356]Bilgin P., "Only strong states can survive in Turkey's geography: The uses of Geopolitical truths in Turkey," Political Geopgraphy, 26, 7 (2007): 740-756.

However, for Bilgin, a recurrence of the fears from the Sevres Treaty is still predominant today. There is a paranoiac tendency amongst politicians and the military elite that Turkey is surrounded by enemies. This can be understood from the Turkish geo strategic thinking during the Cold War, which included defensive, non-involvement and external choices.[357] In the post-cold war period, economic liberalization encouraged Turkey's military to get closer to civilian politics thereby decreasing the defensive realpolitik tendency and promoting foreign policy activism. The second important development in Turkey's strategic culture took place in the 1980s. Following the 1983 elections, the civil government of the Motherland Party shifted away from state controlled protectionist economics to promote entrepreneurship which was in line with the demands of the world economy. President Özal, a firm believer in economic liberalism, placed emphasis on international economic interdependence. Economic liberalization facilitated Turkey joining the European Customs Union in 1995 and its EU candidacy status in 1999. Although it may take years before the economy becomes a totally free economy, the policies adopted have had significant effects on Turkey's foreign policy. The increasing importance of economic considerations in external affairs created opportunities for entrepreneurs and firms to play a role in Turkey's foreign policy orientation, thus moving away from the traditional security policy elite.

The changes in the economy and liberalization also impacted the defense industry. Whereas all plants were operated under the state economic enterprises by the armed forces, there was increase cooperation with the private sector. This military readiness to cooperate with the private sector increased options both for Turkish and foreign

[357]Ibid., 742.

firms which were looking for investment opportunities in Turkey. The potential intensification of business relations between the private sector and the armed forces is likely to moderate the military's state-centric conception of internal and international politics.

Another important determinant of the Turkish strategic culture is its membership in NATO. There is a widely accepted view among NATO members that the function of the Preparation for Peace (PfP) is to orient its participants toward the core democratic values of the Atlantic Alliance. From this perspective, Turkish foreign and security policy elite believe that Turkey's membership in Western institutions, together with its intercultural role as a stable bridge between Europe and the rest of Eurasia[358] would put Turkey in a unique position to project Western values to the newly independent states in the Caucasus and Central Asia. It is also believed that Turkey's new activism will, in turn, consolidate its own Western identity.

The Armed forces sees itself as the guardian of the state, established and maintained according to Ataturk's ' Republican and secularist principles. In other words, the task of the armed forces is to protect the political and territorial integrity of the state as well as its secular character not only against external threats but also against its internal enemies.

In the military's eyes, there are two fundamental internal enemies: one is the militant Islamist movements that threaten the secular character of the state; the other is the

[358]Reed H. A., "Turgut Ozal 1927-1993" in John L. Esposito, ed., 77 Oxford Encyclopedia of the Modern Islamic World (New York: Oxford University Press, 1995).

Kurdish separatist movement represented by the PKK. Turkish scholar Altunisik has examined Turkish strategic culture in relation with its Middle East policies in general and policy towards Iraq in particular and identifies a dominant strategic culture shaped by four entrenched norms:

- A pro status quo power aiming to preserve the existing distribution of power and territory;
- A state strategic culture dominated by the tradition of realpolitik;
- Non-involvement in the internal affairs of the region (Middle East), a reluctance to get involved in a region characterized by conflict and an extension of Turkey quest for locating itself in the European state system;
- Perception of a national historical experience and the trauma from a transition from an empire to a state.[359]

These entrenched norms of Turkish security culture explain how Turkey has responded to the developments in Iraq since the Gulf War in 1991. Different persons have called for an Islamists neo-Ottoman ideology pushing for increased involvement in the Middle East. Turkish President, Turgut Ozal in line with these calls strengthened Turkey's Middle East policy in the 1990's. Turkey policy during the Gulf Crisis in 1990-1991 clearly reflected this vision. In 2002, the Justice and Development Party (AKP) developed a different Middle East policy and shifted foreign policy towards Iraq to increased cooperation. Nevertheless, the dominant strategic culture in Turkey still remains based on the norms described as well as post-cold war developments, domestic and international. For instance, the rise of the political Islamists and Kurdish

[359]Altunnisik Meliha B., "Turkey's Security Culture and Policy Towards Iraq," *Perceptions* 12 (2007):69-88.

nationalists contributed to reinforce a strong feeling of insecurity to Turkey's secular identity.

Traditional Islamist line party influence grew in the polls to the extent that during subsequent elections in the 1990s, some municipalities including Istanbul and Ankara were won by the Islamist party, (RP- Refah Party), which later won the 1996 elections.

As the attacks by the Kurdish nationalist Kurdistan Workers' Party (PKK) have escalated and challenged Turkey's security, the National Security Policy Document was modified in 1997 to combat this. Islamic and Kurdish separatism were identified as major threats to Turkey's security. The increased sense of threat was directly linked with the volatile climate and tension in Iraq following the Gulf war. Turkish national security threats were closely identified and related with the Middle East.[360] The tensions linked to the Middle East subsisted in the late 1990s and most of the 2000s with the capture of Abdullah Öcalan and the cessation of PKK terrorism. Yet the conflicts reemerged in the mid-2000s as the PKK once more started gaining momentum. Overall, these internal conflicts have negatively affected the way Turkey perceives itself and its relations with Iraq and the Middle East.

The initial change in Turkish strategic culture began when the AK party came in to power in 2002. Erdag and Kardas assert that Turkey's strategic culture is based on realism and idealism. This new cooperative strategic culture became an asset with the ruling AK party coming into power in 2002. They suggest that with the change of government, Turkey's strategic culture has become accommodationist (uzlasmacı) and

[360]Erguven Sadi, "Turkey's Security Perceptions," Foreign Policy 3, 3 (1998): 32-42

has developed an economic growth oriented strategy.[361] They also argue that a new strategic culture was formed with the guidance of then Foreign Minister Ahmet Davutoglu, and this has made Turkey diplomatically more proactive in the region and certainly a more cooperative country which has parted ways with its passive existence and old culture after the cold war period, even though there is also a realist logic for Turkey's cooperative policies towards the Middle East due to its energy demand issues.[362] Ahmet Davutoglu's cooperative strategy is known as the *zero problems with the neighbors*. According to this strategy minimizing the problems with Turkey's neighbors and establishing diplomatically strong connections and collaboration within regional and global security measures is the way forward. In this sense, Davutoglu suggests an ideological system within which the strategy can be used to decrease the security concerns and potential war risks between the countries by acknowledging that it is not possible to have zero problems with neighbors. In addition to this, the strategy also seeks to change the perception of the traditional strategic security frame into potential trade with neighboring countries. From this point of view, it can be understood that Turkeys zero problems with its neighbors is aimed at increasing and strengthening economic ties and establishing new connections that once were abolished because of security reasons.[363]

Several prominent Turkish scholars also emphasize that when the ruling AK party came into power, it made domestic reforms, obtained proactive policy, took steps

[361]Erdag R. and Kardas T., "Turk Dis Politikasi ve Stratejik Kultur-Turkish Foreign Policy and Strategic Culture," *Turk Dis Politika Yilligi* (2012): 67-90.

[362]Ibid., 83.

[363]Sadık Unay, "Economic Diplomacy for Competitiveness: Globalization and Turkeyis New Foreign Policy," *Perceptions* 15,3-4 (2010).

towards accession into the EU, sought for democratization in the region, respect for human rights and supported freedom of speech in the country.[364] It is a fact that AK-party sought to make reformist developments in the country. As previously mentioned in chapter four, the current government decreased the influence of the military in the government in order to reach EU requirements. In this regard, it can be stressed that Turkish strategic culture was reformed according to a new Turkish foreign policy that sought to establish multilateral relations not only with the EU and the United States, but with the Islamic world as well. From this point of view, Aras and Fidan also discuss that Turkey's zero problems policy is also related to the geographical position of Turkey as the country is between Europe and the Middle East.[365] Because of its geographical position, the AK-party has widened its foreign policy horizons in order to begin to develop a regional strategy and policy and to search for a role in faraway states.[366]

This new Turkish foreign policy does not only adopt Western policy but at the same time establishes political ties with other countries without necessarily giving up on its western policy. In other words, the new Turkish strategy can be put as the establishment of interaction and connection in multi-dimensional ways. In this regard, Ahmet Davutoglu claims that Turkey would be the most active country in Europe in the near future,[367] as well as that Turkey should reach all EU requirements by 2023

[364]Dursun D., Duran B. And Al Hamza, Donusum Surecindeki Turkiye: Aktorler, Alanlar, Sorunlar (Alfa Yayinlari, 2007).

[365]Fidan H. And Aras B., "Turkey and Eurasia: Frontiers of New Geographic Imagination," New Perspectives on Turkey, *Cambridge Journals* 40 (2009): 193-215.

[366]Aras B., Dagci K. and Caman M. Efe., "Turkey's New Activism in Asia," Turkish Journal of International Relations 8, 2 (2009):24-39.

[367]Radikal, "Davutoglu: Hatti Diplomasi Yoktur Sathi Diplomasi Vardir, Satih ise Tum Dunyadir," Radikal Newspaper, 5 January 2010, 1-4. http://www.radikal.com.tr/politika/davutoglu-hatti-diplomasi-yoktur-sathi-diplomasi-vardir-satih-ise-tum-dunyadir-972801/

and become an EU country with strong diplomatic ties with its neighbors in the Middle East.[368] Aras also explains the new strategic culture from Davutoglu's perspective as "Turkey has multiple regional identities and thus has the capability to follow and integrated foreign policy to bring variety of issues into the same picture from the Middle East peace process to stability in the Caucasus."[369] After these strong statements by Davutoglu, it can be seen that the current government did not stay faithful to its EU accession as Alexander Murinson discussed in his work; "regarding the membership in the European Union, Davutoglu argues that Turkey cannot wait endlessly at the EU door, and must to develop a multi directional foreign policy by utilizing its geostrategic advantages."[370] Turkey's efforts to access the EU and its strategic relationship with the United States and NATO stay as an important issues for Turkey. However, Turkey now wants to ensure that it sits in the driver's seat, in other words, it wants to make sure under the AK-party government that it is a regional power and player. In that regard, Turkish decision makers have gradually adopted a Turkish centric world view, which implies the transformation of States around Turkey in the image of western norms that is now seen to be important for Turkey's security interests.

Turkey's security perspectives within its multidimensional approach drafted in the synopsis of Ministry of Foreign Affairs (MFA) stresses that as a member of NATO and all leading European and Euro Atlantic institutions, Turkey within the AK-party

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[368]Ibid., p.3.

[369]Aras Bulet, "The Davutoglu Era in Turkish Foreign Policy," Insight Turkey 11, 3 (2009):127-142.

[370]Murinson Alexander, "The Strategic Depth Doctrine of Turkish Foreign Policy," *Middle Eastern Studies* 42,6 (2006): 945-964.

pursues a policy of friendship and cooperation in the region and beyond. Regarding its external threats, the Turkish General Staff adopted a multidimensional approach to provide security internationally with a statement on peace and stability that is contained in the National Security Policy document dated November 2010.[371] According to Erdag and Kardas, Turkey with its new foreign policy and approach wants to contribute to global peace and stability, as well as seek peaceful and diplomatic solutions for Iran's nuclear ambitions. They also suggest that Turkey took the initiative under the strategy of zero problems with its neighbors' policy.[372] In this regard, within the zero problems with neighbors' policy, Turkey has increased cooperation with several regional partners especially those countries previously considered as security threats in national security documents. These countries include; Russia, Iraq, Greece and most significantly Iran due to its nuclear facilities. Iran and Russia are particularly important for Turkey in light of their energy collaborations. It is previously stressed that these two countries provide natural gas to Turkey, and Turkey solves its energy demands mostly from the energy it gets from Russia and Iran. In addition to this, a number of technical cooperation agreements on train and scientific matters concluded in the Balkans, the Middle East, Southern Mediterranean, Sub Sharan Africa and South America, as well as with NATO in the matter of defense industry cooperation. As a result, these agreements form part of Ankara's goal to be accepted and respected by the international community and to show as proof that Turkey is open to interoperability with other states to establish not only sustainable regional but also global security.[373] The scholars Altunisik and Cuhadar suggest that

[371]Coskun Bezen B., "Turkey," in Biehl Heiko, et al. ed. Strategic Cultures in Europe: Security and Defense Policy. (Springer Fachmiden Wiesbaden, 2013), 359-369.

[372]Erdag R. and Kardas T., 84.

[373]Coskun Bezen B., 362.

Turkey has begun to speak softly in terms of economic diplomacy using soft power tools instead of preferring hard power (military). It seeks to contribute to the settlement of conflicts as well as to play a critical role in the resolution of these regional disputes, and more importantly to mediate between Iran and Western powers.[374] At the same time, some scholars assert that Turkey has the second largest military power and army in NATO, and it spends four percent of its national treasure on military expenditures. The Turkish military has also sophisticated military capabilities such as land forces, navy and air forces that are all subordinated to Turkish General Staff. In addition to this, Gendarmerie and Coast Guards command are under the leadership of Land and Naval forces.[375] Recently, the Turkish Land Forces started reforming and downsizing its capacity by providing highly trained forces to increase mobility and produce a highly trained force that can conduct joint operations. It also adopted aerospace and missile defense concepts with an integrated missile defense system. The Turkish Army Force seeks to create a modern and sustainable force structure and strong command control system.

In Turkey, national security policy is constructed by the national security council which is composed of the president, the prime minister, the chief of general staff, the deputy prime ministers, ministers of justice, national defense, internal affairs, commander of the Army, navy, and air forces and the general commander of

[374]Altunisik Meliha and Cuhadar Esra, "Turkey's Search for a Third Party Role in Arab-Israeli Conflicts: A Neutral Facilitator or a Principal Power Mediator?" Mediterranean Politics 15, 3 (2010): 371-392.

[375]Turkish Armed Forces General Staff, "Force Structure," Updated on 16 August 2016. Available at: http://www.tsk.tr/AboutTaf/ForceStructure

gendarmerie, under the chairmanship of the President of the Republic.[376] The Council submits its views to the Council of ministers who assesses the decisions with regard to Article 118 of the constitution on the preservation of the existence and independence of the state, the integrity and indivisibility of the country peace and security of society. The council of ministers is responsible to the grand national assembly of Turkey for the preparation of the armed forces and the national security as it is states in Article 117. The Chief of general staff is appointed by the president and the general is responsible to give reports to prime minister about his duties and military exercises. Martial law can be declared under Article 122 of the constitution by the council of ministers under the chairmanship of the president of the republic after consultation with the national security council. Additionally, Article 92 regulates declaration of the state of war and the power in order to deploy Turkish army forces is given to the General Assembly.[377]

Even with its considerably powerful military armed force, Turkey does not want to be perceived as an aggressive state. Turkish strategic culture has been defensive adhering to Ataturk's principle of 'peace at home peace in the world' principle. Hence, the Turkish military reinforces this idea by not pursuing aggressive intentions to other states, except, when the country's independence, nation or honor is under threat. In such instances, it would not hesitate to exercise its power within the common framework of the ideals of international organizations of which Turkey has membership.[378] The missions and responsibilities of the TAF are stated in the Turkish

[376]Republic of Turkey Secreteriat General of the National Security Council, "National Security Council Member," Updated on 2013. Available at: http://www.mgk.gov.tr/en/index.php/nsc-members

[377]Coskun Bezen B., 363.

[378]Turkish Armed Forces General Staff, "History" updated on 2016. Available at: http://www.tsk.tr/AboutTaf/History

constitution and is determined by the law. Within its many responsibilities TAF ensures the contribution to regional and global peace and ensure to provide security in Turkish territories.

Turkey's cooperation with the United States is also based on its understanding of the US as "the sole super power". Under NATO, Turkey provides its support for the initiatives of disarmament and arms control. It also advocates that disarmament should continue under NATO's control in an impartial manner would not threaten the security of the State. While discussing Turkey's role in NATO, the author Ergan clarifies that Turkey has clearly announced that it is protected under NATO's nuclear security umbrella. Hence, Turkey's national security and defense doctrine do not contain any deterrence based on weapons of mass destruction.[379] Similarly, the author Oguzlu suggests that Turkey still accept NATO as an important guarantee for its security concerns and because of its presence in Turkish soil, Turkey avoids any attempt to acquire nuclear weapons. Within this strategic approach, Turkey hopes that, NATO would develop a ballistic missile defense capability in terms of proliferation. Furthermore, he reinforces the idea that Turkey has played a facilitator role between Tehran and Western Powers in order to convince Iran to give up upon its nuclear weapons ambition.[380] It is a known fact that Ankara's approach to the Iranian question is shaped on maintaining the status quo of the NPT set of rights. Turkey supported Iran as an NPT signatory having the right to access uranium enrichment, as long as it is in compliance with the NPT. The relationship between Turkey and Iran are based

[379]Ergan Ugur, *Hurriyet*, May 8, 2006.

[380]Oguzlu Tarik, "Turkey and The West: The Rise of Turkey-centric Westernism," *International Journals* 66, 4 (2011): 981-998.

on the fundamental principles of non-interference in internal affairs, good-neighborliness, and economic and security cooperation. However, Iran's nuclear ambitions are viewed with concern in Ankara. Turkish officials are clear that they do not want to see an Iran with a nuclear weapon capability. Ankara's chief concerns were specified by Sinan Ulgen as:

- A nuclear armed Iran would present a direct challenge to regional stability. Although the possibility of a nuclear arms race cannot be totally discounted, a nuclear armed Iran could become a more aggressive state in the pursuit of its foreign policy objectives.
- A nuclear armed Iran would pose a challenge to Turkey in the Middle East.
- Such a development would also deal a severe blow to the global proliferation regime.
- Finally, a showdown between Israel and Iran could also have very destabilizing consequences for the whole region.[381]

In short, Turkey is concerned as much as its western allies about Iran's quest for nuclear weapons. Thus, Turkish policy makers and Erdogan seek for a diplomatic solution to this problem and still believe that this is relatively achievable. In the same line, the United States also relies on Turkish collaboration in order to bring to an end Iran's nuclear weapons program. Turkey has also specified its concerns that Iran would rise as a regional hegemon and this would cause other Middle Eastern countries to want to develop nuclear arsenals, which will be a clear security threat to Turkey as well as to the global security of the world. As earlier stated, the official Turkish

[381]Ulgen Sinan, "The Proliferation of Weapons of Mass Destruction: What Role for Turkey?" *Transatlantic Academy* (2010): 1-18.

approach to this nuclear threat is to carry on with diplomatic and soft power solutions. However, it is also stressed that Turkey also supports coercive UN economic sanctions over Iran. A common fear within the Turkish government is that any possible military action against Iran could instead prompt Iran to hasten its nuclear ambitions. In other words, as Ahmedinejad had stated, "the time for an apocalypse after which Islam will emerge triumphant."[382]

Turkey also hosts US Tactical Nuclear Weapons (TNW) under the "burden sharing principle" within its territory. In this regard, US TNWs are perceived as a guarantee of Washington's security commitment to Turkey as well as providing Ankara a sort of enhanced status within the Alliance. More significantly, US TNWs continue to be a strong deterrent not only vis-a-vis Iran, but more widely against possible proliferation in the Middle East in response to Tehran's nuclear program. Mustafa Kibaroglu reinforces the idea that in Turkey there is a common understanding that the United States' weapons stand as a strong impediment against Iran's potential nuclear threats and for further possible nuclear weapon proliferation in response to Tehran's nuclear activities. There are other allegations that, if Turkey gives up upon the United States nuclear armament, and Iran later operates nuclear weapons, Turkey will have no choice but to build its own nuclear weapons system.[383] Therefore, hosting tactical nuclear weapons in her region also prevents Turkey from establishing its own military nuclear program in responds to the potential nuclear proliferation of Iran and other states in

[382] Friedman, Norman, "Posturing in the Middle East?" *U.S. Naval Institute Proceedings* 133, 4 (2007): 90-1.

[383] Kibaroglu Mustafa, "Reassessing the Role of U.S. Nuclear Weapons in Turkey," *Arms Control Today* 40, 5 (2010): 8-13.

the region.[384] These observations suggest that the US nuclear weapons on Turkish soil in principle prevent further nuclear proliferation in Turkey as well as other countries in the region.

The increase of WMDs in today's 21st Century is a serious threat, worsened by the easy access to these weapons in the black market. The lack of interventionism in some countries is contributing to raise this threat as weapons end in wrong hands. As a country whose borders regions are always at risk, Turkey is supports disarmament, arms control, nonproliferation and is a party to many international agreements to this effect.

Turkey is also a member to the Proliferation Security Initiative (PSI) since 2005, which is led by the United States and was launched by 11 countries on May 31st, 2003. For the United States, Turkish adhesion to the PSI represented an important step as it showed Turkey's intent to participate in the prevention of missile and nuclear technology from reaching Middle Eastern states that are seen as potentially risky and capable of developing nuclear weapons. As a PSI member state, Turkey hosted the land-air-sea interdiction exercise "Anatolian Sun," with 37 guest nations from May 24-26th ,2006.[385]

[384]Barkey J. Henri, "Turkey's Perspective on Nuclear Weapons and Disarmament," in Barry Blechman (ed.) Unblocking the Road to Zero Perspectives of Advanced Nuclear Nations, *Stimson Nuclear Security Series* 6 (2009).

[385]Ulgen., 4.

In all, it is stated in the Republic of Turkey's Ministry of Foreign Affairs official page that Turkey hopes to see that all countries will be gathered for the same purpose of non-proliferation and to work for a safer and more stable world together.[386]

As Turkey recently deals with the failed coup attack, the country fragility to Islamic terrorist attacks have raised doubts about the safety of the United States nuclear weapons at the US air base at Incirlik. Most experts assume that there are 50 nuclear gravity weapons in Turkey from Cold War Era. As a result of these attacks Turkish authorities cut off the power supply and temporarily closed the airspace around Incirlik. Interestingly enough, Turkish commander also arrested at the Incirlik air base for his involvement in the military coup. The United States, immediately raised forced protection levels to 2700 military personnel within the hours of the military coup. According to the statement made by Pentagon spokesman Peter Cook the United States have taken all the necessary steps that it need to take to ensure that American nukes are under control, safe and secure.[387] Barbara and Ryan also introduces Joshua Walkers statement as the bombs are a point of pride in Turkey, and Turkey perceives them as a benefit of being a member to NATO for its nuclear umbrella.[388] In addition, it is also controversy, why America wants to keep the nukes at Incirlik, because it is identified that there are no certified aircraft in Turkey to carry nuclear weapons in the case of emergency.[389] In this regard, it can be assessed that the official American policy makers escapes from giving an clear answer if the nuclear weapons in Turkey are safe

[386]Republic of Turkey Ministry of Foreign Affairs, "Arms Control and Disarmament," Updated on 2011. http://www.mfa.gov.tr/arms-control-and-disarmament.en.mfa

[387]Starr Barbara and Browne Ryan, "How safe are US nukes in Turkey?" CNN Politics, July 19, 2016. Available at: http://edition.cnn.com/2016/07/19/politics/us-nuclear-weapons-turkey-attempted-coup/

[388] Ibid. p.1

[389]Lewis Jeffrey, "America's Nukes Aren't Safe in Turkey Anymore," Foreign Policy, July 18, 2016. Available at: http://foreignpolicy.com/2016/07/18/americas-nukes-arent-safe-in-turkey-anymore/

and secure, or if it will be deployed or not. Similary, Dan Lamothe also discusses the safety of the nuclear weapons in Turkey. The author brings two opposite point of view in his article as, those in favor of the nuclear deal with Turkey that the United States is keen on keeping the nukes in Turkey for strong position in order to protect its national security interests, assure allies and deter adversaries and it also suggested that withdrawal of the current U.S. tactical nuclear weapons would be ill advised. On the contrary, Lamothe also includes that back in 2005 the elimination of the nukes from Turkey was suggested but most of the leaders in NATO rejected it, and recently with the failed coup attempt, it is highly risky to keep the nukes in Turkey within so called Islamic terrorist attacks.[390] However, in this case, it is also not clear that if the nukes are safe in Turkey or it would be moved out. It seems, America is more concerned about its security interests in the region and its deterrence with the nukes. The question is, in case any terrorist attack to Incirlik, would it give Turkish authorities the responsibility to use those nukes.

According to Jeffrey Lewis, "Incirlik airbase is not a fortress, it is not intended to withstand a siege by the host government any more than an embassy might."[391] In this sense, he suggests that although America raised the force of military personnel, in case of Turkey's decision to use nukes is possible since the nukes are being hosted in her soil. Similarly, the prominent scholar Mark Fitzpatrick also suggests that it is not hard to think in these circumstances that Turkey takes over the U.S. airbase and commandeering the United States tactical nuclear weapons. Although, the nukes are

[390]Lamothe Dan, "The U.S. stores nuclear weapons in Turkey. Is that such a good idea?" The Washington Post, July 19, 2016. Available at: https://www.washingtonpost.com/news/checkpoint/wp/2016/07/19/an-old-nuclear-weapons-deal-raises-new-questions-about-u-s-bombs-in-turkey/

[391] Lewis, 1.

protected against unauthorized use under the Permissive Action Links, after the time passed and with sufficient training the nukes may potentially be activated and used.[392] In addition to this, according to nuclear cooperation agreements between the United States and Turkey in time of war enable the host country to use its national air force to carry the tactical nuclear weapons.[393] In this regard, it is very contradictory that Turkey is actually assigned to carry the nuclear weapons, considering that it does not have any certified air force nor any trained pilot to carry US gravity bombs.

On the contrary, according to other sources, the US has started deploying its nuclear tactical weapons stationed in Turkey to Romania, because the US and Turkey relations had got worse due to the military coup that the United States loses its trust to Ankara regarding the safety of its nuclear weapons in Turkey. The source suggests that although the Romanian Foreign Ministry has rejected such claims, the nukes have already moved to Deveselu air base in Romania.[394] The day after these claims are specified as irrelevant because it lacked of enough evidence and quotes and perceived as provocative move by Moscow to. It is stated by John Lewis (the director of non-proliferation studies in Monterey) that Romania does not have the special Weapon

[392]Fitzpatrick Mark, "The security risks of nuclear weapons in Turkey outweigh the benefits," Politics and Strategy, July 29, 2016. Available at: https://www.iiss.org/en/politics%20and%20strategy/blogsections/2016-d1f9/july-001c/the-security-risks-of-nuclear-weapons-in-turkey-outweigh-the-benefits-a8fe

[393]Kristen Hans M., "U.S. Nuclear Weapons in Europe, A Review of Post-Cold War Policy, Force Levels, and War Planning," Natural Resources Defense Council (2005): 1-102.

[394]Gotev Georgi and Schalit Joel, "US moves nuclear weapons from Turkey to Romania," EurActiv, August18, 2016. Available at: http://www.euractiv.com/section/global-europe/news/us-moves-nuclear-weapons-from-turkey-to-romania/

Storage and Security System (WS3) vaults that is necessary to store the tactical nuclear weapons.[395]

Later in the section of Appendix, this study has given a place to interviewees. This section seeks to find answers from prominent Professors all around the world regarding Turkey's Nuclear Program and the United States Nuclear Tactical Weapons in Turkey. This interviews cover the important part of my thesis. It literally helped me to establish my ideas and put it in throughout this thesis.

[395]Dan De Luce, "No, the U.S. Is Not Moving Its Nukes From Turkey to Romania," Foreign Policy, August 19,2016. Available at: http://foreignpolicy.com/2016/08/19/no-the-u-s-is-not-moving-its-nukes-from-turkey-to-romania/

Chapter 6

CONCLUSION

Turkey's dependency on foreign energy sources has always been an important concern for the country, especially in its bid to becoming an energy independent state. In this light, Turkey seeks the exploration of atomic energy in order to ease its dependency on foreign energy import. Turkey's aspirations to keep nuclear power on the table are understandable within the context of its emerging energy demands. Turkey's nuclear adventure began when world's first Atom for Peace nuclear agreement was signed between the United States and the Republic of Turkey in 1955. Turkey in 1965 started nuclear studies to develop a nuclear power plant, but this was never transformed into concrete outcomes. Today, there is a small research reactor that was built in 1962 outside of Istanbul, at Kucuk Cekmece which only provides isotopes and other services for medical purposes. In addition to this, there are two small nuclear facilities for experiment purposes located in Ankara.

In the late 1980s, under the leadership of Prime Minister Turgu Ozal, and also under the leadership of Prime Minister Bulent Ecevit in the 1990s, Turkey initiated a program to develop nuclear weapons, but on both attempts internal disputes about the benefits of nuclear energy, financing as well as uncertainties surrounding the nuclear technology to be adopted, prevented a successful completion of these nuclear programs.

One of the biggest concerns of the international community during the 1970s and 1980s was the strong relationship that Turkey and Pakistan had, known as the Brotherhood. This relationship between these countries was an issue of concern, and there were suspicions in the United States and NATO, especially with regards to the transfer of nuclear material and technology. Hence, Washington threatened to stop sending economic aid to Turkey, while NATO blocked Pakistan's uranium enrichment program. The United States also applied military and economic sanctions on Pakistan with the aim of stopping the development of its nuclear weapon program. Turkey's endeavors in acquiring nuclear energy failed several times because of the impact of its brotherhood relationship with Pakistan. There were concerns in the international arena even though Turkey had clearly expressed that its relationship with Pakistan was based solely on trade.

Under the AKP-led government, Turkey endeavored tried once more to become a nuclear power in a bid to meet up with its rising energy demands. Turkey had prospects to build its first nuclear power plants with Rosatom, a Russian company in the Akkuyu province, and the second one in the Sinop province with collaboration from France and Japan. There is a third plan which is still undergoing negotiations with Chinese companies, and an American company, Westinghouse, in the Igneada, and the Kirklareli province close to the Bulgarian.

According to some experts, the fact that Ankara did not specify the terms for the delivery of uranium and the removal of radioactive waste could suggest that Turkey seeks to have a free hand for potentially collecting materials and the technology that is necessary to develop a civilian nuclear program.

Under the build-own-operate agreement between the Republic of Turkey and the Russian Federation on the Akkuyu Nuclear Power Plan, the vendor will pay for the nuclear power plant, and the project company (Rosatom), will provide nuclear fuel to the NPP. However, radioactive waste management and the reprocessing procedures as well as the transportation of the spent fuel are not clearly specified in the agreement. In this case, it would be useful for Turkey to be more transparent regarding its intentions on spent fuel and radioactive waste management. In this context, Turkey has not developed a comprehensive nuclear energy policy and has not established a clear legal framework regarding uncertainties in fuel cycle and civilian liability in case of nuclear accidents.

Turkey has a stellar history of nonproliferation and is a signatory to every relevant IAEA, as well as international treaties and organizations which govern the spread of nuclear technology. Furthermore, it has been a member to NATO for decades and an EU candidate country. Turkey has specified its intentions, and has clearly stated that it would not take the option of trying to build a nuclear arsenal, because it does not want to disrespect international law and not violate the rule of noncompliance in the international organizations belongs to. In this case, the benefits of acquiring nuclear weapons do not outweigh the costs of economic and political sanctions that country would face by leaving the NATO nuclear umbrella and considering to break its strategic alliance with the United States. Hence, any Turkish action to proliferate would significantly damage its international standing as well as its relations with the United States and other NATO countries.

During the Cold War period, Turkey faced threats from a nuclear Soviet Union. Yet, instead of developing any nuclear potentials of its own, Turkey allied itself with NATO

and chose to be part of NATO's nuclear umbrella in order to strengthen its territories security. However, since the early 1990s, the Turkish Government has in fact felt threatened and pressured by Iran's nuclear program. However, it has also supported Iran's right to develop nuclear energy for peaceful purposes as there existed transparency.

Turkey has as well adopted a new foreign policy, zero problems with neighbor countries that favor soft power and a robust diplomacy as well as economic cooperation with its neighbors. This policy simply aims to decrease regional tensions, and create a more favorable environment for trade and development especially in the energy sector.

The change from a military dominated to a civilian dominated political structure has also played a part in Turkey's foreign policy and nuclear objectives. As earlier stated, this shift has changed Turkey from a more circular state to amore authoritarian and Islamic state.

With this policy of zero problems with neighbors, Turkey seeks to play a strategically important role and to establish itself as a mediator in the region. These attempts are visible especially as Turkey drifting from its Western Alliances and the United States of America, and rather seeking to strengthen its ties with Middle Eastern countries under Islamic rulers. To become a regional player, Turkey needs to be an energy free state. In this light, it has been claimed that Turkey will first acquire nuclear energy for civilian purposes and will later will it in to military programs in an effort to assert its authority over the region. However, presently, Turkey does not have the technology or the capability to develop nuclear weapons in the near future. Furthermore, Turkey does

not have the relevant infrastructure to enrich uranium and plutonium, to reprocess nuclear spent fuel nor does Turkey have the expertise, personnel or engineers to operate such facilities to produce nuclear weapons. It is also important to keep in mind that, every country has a right to develop its nuclear energy program for civilian purposes, and once civilian nuclear power program is established it is always possible to divert it in to military program. It usually depends on the type of Leader the country has. Today, although many states support disarmament and a nuclear free world, there are still a significant number of nuclear weapons in existence. Some countries as well have not ratified NPT, or adopted the IAEA safeguards. Some other countries have withdrawn from NPT in order to build nuclear weapons.

In all, countries always feel threatened when their neighbors have nuclear weapons, and are thus prompted to develop the technology necessary to acquire nuclear weapons as well. In this case, for a stable and sustainable free nuclear world, countries should reconsider their nuclear options and capabilities, as well as international treaties and organizations should find a way to enforce security and safe guards using a more robust approach.

Finally, later in this thesis, the section of Appendix has the list of interviewees. This section gives a place to two important questions regarding Turkey's Nuclear Program and the effect of recent military coup on the United States Nuclear Tactical Weapons in Turkey that seek answers from prominent and important professors.

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APPENDIX

Interviewees

In this part of this study, two questions related to Turkey's Nuclear Program and if its drift from the West has impact on extended deterrence as well as the United States Tactical Nuclear Weapons in Turkey.

Following the military coup on 15 July, although Turkey had a support from the west, it is suggested that Turkey had drifted from its Western Alliances long ago, yet it seeks to strengthen its ties with Russia as Russia is a center of energy for Turkey.

Regarding the Iranian nuclear file, we all know that it created a serious security concerns for Turkey, but we also know that every country has a right to develop nuclear energy for peaceful purposes. In this sense, Turkey is launched a nuclear energy program one in Akkuyu province and the other one in Sinop.

It is announced by the Turkish officials that Turkey's nuclear energy program stands only for peaceful purposes. In your view,

1. Is Turkey drifting away from the West, if so would this policy have repercussions on extended deterrence and tactical nuclear weapons deployed in Turkey?

2. Do you think Turkey would clandestinely seek to develop nuclear weapons, considering its security threats in the region?

- **Dr. Nilsu Goren**

Question 1:

I would argue that, despite the current political climate, NATO remains as the backbone of Turkish defense planning. Turkey has been historically wary of U.S./NATO extended deterrence due to its fear of abandonment. The common view is

that U.S. tactical nuclear weapons (TNW) in Europe give Turkey reassurance of maintaining a credible NATO deterrent against possible adversaries and TNW removal would weaken those reassurances. In fact, the U.S./NATO-Turkey strategic partnership cannot be reduced down to the existence of TNW at Incirlik. Turkish officials have stated that Turkey would not argue against a NATO-wide decision to remove TNW. U.S. strategic forces are the 'supreme guarantor' of NATO security and non-nuclear capabilities in addition to U.S. strategic nuclear forces have a role in providing credible extended deterrence to Turkey. However, political dialogue is direly needed to reemphasize this commitment explicitly.

Question 2:

Even though some express concern regarding the weapons-potential of the Turkish nuclear energy, in its current configuration, it does not provide Turkey with capabilities, material or expertise needed for nuclear weapons, since the program will be entirely designed and operated by Russia. There is no possibility of Turkey building the indigenous breakout capability through a quick, clandestine weapons program without being detected under a nuclear energy program.

So far, Turkey has projected neither the desire nor the acquisition of capabilities toward nuclear weapons development. Even considering a speculative scenario, for the foreseeable future, Turkish nuclear weapons would have no meaningful value added for Turkish security, e.g. against Kurdish terrorism or ISIS as the top threats. A nuclear-armed Turkey outside of NATO would have high political and economic costs and bring isolation, which Turkish policymakers would not find appealing.

- **Dr. Mark Fitzpatrick**

Question 1:

Turkey's current drift away from the West may not represent a long-term trend, so we should not be too hasty to draw conclusions. I do not think it is likely, but in the unlikely circumstance that the drift were to continue to the point where Turkey's membership in NATO were imperiled, then, of course, the United States would need to remove nuclear weapons and other key assets. A more relevant issue in this regard, however, is the security of the weapons. The vulnerability of those weapons to being seized is a good reason to remove them now. As I wrote in a blog post on July 29:

The July coup raises serious question…as to the security of the weapons at Incirlik. The Turkish base commander used assets there to fuel the F-16s that bombed the parliament. In response, the government closed the airspace over Incirlik, cut off its electricity and arrested the commander. Turkey's labour minister accused the US of complicity; conspiracy theories about US involvement have flourished. There is thus greater reason to worry about the safety of the weapons than was the case during previous coups d'état and putsch attempts in Turkey. Washington's rightful refusal to extradite Pennsylvania-based Fethullah Gulen without legitimate evidence to back up the Turkish government claim that he instigated the coup will exacerbate ill will.

This time, luck was against the putschists. It is not hard, however, to imagine circumstances resulting in a Turkish takeover of the US part of the base and commandeering of the nuclear weapons. They are well secured against theft, but, as Jeffrey Lewis points out, not against siege by a host nation. The 'Permissive Action Links' that protect against unauthorised use may be bypassed given sufficient time and training. Nuclear-weapons expert Hans Kristensen warned, 'You only get so many warnings before something goes terribly wrong. It's time to withdraw the weapons.'

Playing out the potential scenarios for further trouble, US defence planners would be negligent if they did not weigh withdrawing the nuclear weapons, just as B61s were taken out of Greece in 2001 over safety concern

Question 2:

Under current circumstances, I do not think Turkey would clandestinely seek to develop nuclear weapons. There is no compelling motivation, since Turkey is not threatened by any nuclear-armed country and if it were, it could rely on NATO security guarantees. If both of these two conditions were to change, then Turkey might well consider the option of building its own nuclear weapons. Whether it could do so is another question. Turkey lacks key technologies necessary for nuclear weapons (uranium enrichment or plutonium reprocessing) and I cannot think of any country that would willingly assist a Turkish nuclear weapons development program. Western intelligence agencies would try to prevent any acquisition of technology through the black market. Over time Turkey could probably succeed in developing indigenous nuclear weapons, but it would be very vulnerable during this time and could not count on NATO countries for protection. So it would not be a wise decision.

- **Prof. Dr. Paolo Cotto-Ramusino**

Question 1:

In a sense yes, Turkey is drifting away from the west but its relations with other countries (Russia e.g.) is not "well defined". This will not, in my opinion, have a significant impact on Incirlik Nuclear weapons. As all US nuclear weapons in Europe they are US owned nuclear weapons and there is no chance that Turkey can decide to seize them. The retaliation will be immediate and effective. Before the development of any serious problem with Turkey, the US may decide to withdraw its NW in Turkey (or maybe in Europe).

Question 2:

Developing NW is not too difficult once you have solid civilian nuclear energy program. Will Turkey be the first country in the western emisphere that will withdraw from the NPT? i doubt it very much. If, on the other side, other countries may decide to go nuclear (like Saudi Arabia, Iran.) then Turkey may follow up..But then we will live in a different world

- **Prof. Dr. Tom Sauer**

Question 1:

International politics is rather volatile esp since the last 15 years, I would say. That can also be said of Turkish foreign policy. Remember the zero problems policy in the beginning of the Erdogan period when Turkey was regarded as an example in many North African and Middle Eastern countries (and even in the West)? Then came the Syrian war, and Turkey had to undergo the consequences. At a certain moment, Turkey seemed to be in conflict with most of its neighbours including Israel, Syria, Iran, Russia, etc. Right the opposite of a couple years before. The best example is maybe its relationship with Russia that was relatively good, then came the conflict over Syria (and the shooting of the airplane), and recently there was again reconciliation. Economics and energy are never far away in this story, as you mention. At the same time, Turkey remains a member of NATO. Still now. In short, it seems that Turkey wants to keep as many options open as possible and try to have good relationships with important countries (related to economy and energy). Within this overall picture, Turkey has drifted to the east already in the beginning of the Erdogan period, if I am not wrong, also because it understood that EU membership was not in the pipeline. In 2003, there were cool relations with the US over the Iraq war. Then, the balance shifted a bit back, and nowadays it seems that Turkey is again looking to Russia in the first place.

Whether all this has repercussions on extended deterrence and tactical nuclear weapons, I do not know. I doubt it. The clearest link is what happened during the coup. Now, there are rumors that the tacnukes have been moved out of the country, which is of course impossible to check. As you know my views on this, I would love to see them removed, not only from Turkey, but also from Belgium and the rest of Europe, also for security reasons. As you know, the Ukraine crisis blocked this prospect

Question 2:
That is even harder to guess. I have seen one article insinuating that. And apparently yesterday the editor in chief of the AKP daily Yeni Safak, Ibrahim Karagul, apparently aruged that Turkeu should gain command and control of the TNW in Incerlik. I am a proliferation pessimist (as long as there are nuclear weapons on earth); that means that I think that Turkey going nuclear is a possibility. I would not discard that. How likely it is, is very difficult to say. Current events make it more likely. But the odds are that the situation in Turkey will become better over time, and then the risk of proliferation over there may decline. To be continued.

- **Dr. Jeffrey A. Larsen**

Question 1:
Turkey does appear to be drifting away from its secular nature and to some extent away from the West, in particular from its long-standing goal of joining the European Union. I think, however, that it will retain its position within NATO, and in close cooperation with the United States, due to its important strategic position and its own desire to have the security of a military Alliance on its side. Nevertheless, your president is obviously also attempting to develop closer ties with Moscow, which is antithetical to the West

at the current time. This is a dangerous policy if Ankara wants to remain close to NATO and its European partners.

I do not think this will have any immediate repercussions on the role of the US air base in Incirlik, or the alleged deployment of tactical nuclear weapons in the region. (Something which I can neither confirm nor deny.) Any change to either of those would be a major blow to Turkey's relationship with the West and the USA in particular. Neither side wants that at the moment.

Question 2:

No, I don't believe Turkey wants to develop its own nuclear weapons capabilities at this time. This is a topic well covered in books and articles by a number of good analysts on both sides, including Sinan Ulgan at EDAM in Istanbul. I suggest you read some of his publications. I agree with Sinan's perspective on this. The current generation of Turkish leaders sees the value in being part of a nuclear alliance that provide an extended deterrence umbrella over your country, and thus there is no need to violate Ankara's commitments to the Nuclear Nonproliferation Regime at this time. However, the next generation of Turkish leaders may not feel the same way, especially if proliferation were to occur more widely in the Middle East. In that regard, the nuclear agreement that keeps Iran in check for the next decade is also good for Turkey and its relationship to NATO and the West, because it removes one potential flashpoint that might lead your government to decide to pursue an independent nuclear capability.

- **Prof. Dr. Trevor Findlay**

1. it has international legal obligations not to acquire nuclear weapons, including as a party to the NPT (Iran as you know is also an NPT party but violated its obligations - Turkey would presumably not wish to get into the same situation as Iran with sanctions and hostility from the rest of the world)

2. safeguards: Turkey is under IAEA safeguards on all its nuclear facilities and materials, so it would not be able to move to a nuclear weapons capability in the open; it would have to do so secretly; Turkey even has concluded an Additional Protocol to its safeguards agreement, I believe (you need to check) which imposes even greater reporting and monitoring responsibilities on it

3. technologically: Turkey does not have the capability, now or in the near future, to produce nuclear weapons; if it were to divert spent fuel from its new reactors (difficult under safeguards) it would still have to extract the plutonium; if it wanted to use enriched uranium for its weapons it would need to construct an enrichment plant, a difficult and expensive exercise; under Turkey's arrangement with Russia, Russia will take back the spent fuel from its reactors so that is another barrier; Turkey also does not have the other capabilities (yet) for producing and deploying nuclear weapons, so this is not something Turkey could do overnight

4. international context; Turkey is a member of NATO and is already protected by the US nuclear umbrella, and perhaps that of France and the UK; so there is no need for Turkey to acquire nuclear weapons as long as it believes in these reassurances; part of that reassurance is the deployment of US nuclear weapons in Turkey; quite old aircraft delivered nuclear bombs, but still nuclear weapons