

# TURKEY AND NUCLEAR WEAPONS

## Can This Be Real?

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### INTRODUCTION

Since the dramatic revelations of Iran's illicit nuclear activities in 2002, commentators have speculated that Turkey will follow suit and seek to acquire nuclear-weapon capabilities to balance Iran and meet the potential challenges of a proliferation cascade in the Middle East. Academics and pundits have scrutinized Turkey's interest in nuclear energy projects with a view to "discovering the real motives" behind its past and current initiatives. What is the likelihood of Turkey "going nuclear" in the years ahead despite its outstanding performance under the nuclear nonproliferation regime?

A number of factors are believed to have kept Turkey from seeking to produce its own nuclear-weapon capabilities. A discussion about Turkey's domestic interests and characteristics as well as international factors, such as its membership in the North Atlantic Treaty Organization, its adherence to the nuclear nonproliferation regime, and its European Union (EU)

vocation, will be followed by scenarios about possible courses of action that Turkish policymakers might adopt in case they decided to acquire nuclear weapons. Needless to say, this will be a speculative, intellectual exercise, which will be carried out with a view to addressing a number of issues that are most frequently raised inside and outside of Turkey, such as who would be in charge of a Turkish nuclear-weapon development project, what would be the strategy for evading Turkey's commitments under the nuclear non-proliferation regime, which capabilities and technologies would be acquired and/or indigenously developed for becoming self-sufficient in the long term, who would be the international partners, and the like.

## **THEORIES OF NUCLEAR PROLIFERATION AND THE CASE OF TURKEY**

Nine countries in the world are acknowledged as possessing nuclear weapons. Seven of them—the United States, Russia, United Kingdom, France, China, India, and Pakistan—have proven their capabilities by carrying out nuclear tests. North Korea, meanwhile, also carried out tests, but its weaponization capacity is not known for sure. There is also Israel, which has neither acknowledged nor denied the existence of nuclear weapons in its arsenal.

Considering that approximately 200 states exist in the world, the number of states that are believed to possess nuclear weapons constitutes indeed a small fraction, less than 5 percent. The number of states, however, could have been much higher, perhaps in the dozens. Preventing a significant number of states from pursuing nuclear weapons would have been very difficult, if not impossible, had there been no international efforts that culminated in the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).<sup>1</sup> The incentives as well as assurances that were given to states to join the NPT and to forgo the option of developing nuclear weapons in return for ample support in advancing peaceful applications of nuclear energy were found to be satisfactory by many states that might have otherwise pursued nuclear weapons.<sup>2</sup> Still, some states are suspected of acquiring scientific and technological capabilities that are necessary for developing nuclear weapons. This raises an essential question as to why states would want nuclear weapons.

The dynamics of nuclear proliferation have been explored by many academics.<sup>3</sup> In this sense, the curiosity about the motivation that leads countries to pursue nuclear-weapon programs is well researched.<sup>4</sup> First and foremost, it was found that countries attempt to do so for security reasons, to seek the capability to deter military threats. Neorealist Kenneth Waltz argued that military leaders dislike uncertainty and so claim that they need nuclear power to guard against an uncertain future. Many of the academics focus on external factors such as perceived threats. They maintain that it is a rational response for countries to protect their own interests for state survival. Classical realists, such as Zachary S. Davis and Richard K. Betts, contend that states pursue nuclear-weapon programs if doing so contributes to their own national security, but they accept that domestic politics also play a role in states' decisions. Thereby, they agree that there are different types of states that react differently to external factors.

Classical realists, unlike neorealists, posit that states have multiple, interlinked goals and that these objectives have both domestic and international aspects. Domestic concerns may vary from political stability to social cohesion, or economic strength to technological developments. Politicians try not only to survive in the international arena but also to stay in power as long as possible. Thus, they may attempt to use nuclear-weapon programs as a tool to stay in power by winning public support and enhancing their domestic political position. Governments facing oppositional challenges might use the nuclear card to divert public criticism. In this sense, nuclear weapons can be utilized as an instrument to mobilize a nation's patriotism.<sup>5</sup>

Additionally, states may decide to acquire nuclear weapons in a quest for regional and/or global hegemony. According to the realist assumption, states try to maximize power and therefore undertake such programs because of their desire to achieve regional preponderance. The realist camp argues that these states may even attempt to blackmail other states into submission to their political wishes as a nuclear power. They may want to acquire nuclear weapons to gain prestige and also in order to join the club of "untouchables," and they believe that their nation can attain complete independence only by becoming a nuclear-weapon state.<sup>6</sup>

Moreover, states may do so in order to strengthen their economies, to try to get "more bang for the buck."<sup>7</sup> In other words, they compare

conventional weapons in terms of the security output per dollar. It is here that the belief comes into play that states possessing nuclear weapons invest less on conventional weapons. However, Harald Müller and other scholars argue that nuclear-weapon states still invest in conventional weapons and that acquiring nuclear arms is not necessarily accompanied by decreasing investments in conventional arms.<sup>8</sup>

Furthermore, the bureaucracy, namely the military and scientific establishments, may push the governments in power to embark on nuclear-weapon programs. Persuading decisionmakers to pursue such a policy may get more resources for the bureaucracy, which also seeks to enhance its position vis-à-vis other national institutions.

Finally, the high-tech environment attributable to advances in science and technology enables such programs to be carried through. When the know-how is present, it is easier for bureaucratic institutions to persuade the government to go nuclear.

Against this background, which only briefly explains how and why states are motivated to pursue nuclear weapons, one may argue that these factors have been, in varying degrees, present in the case of Turkey as well. For instance, Turkish security elites have always claimed that Turkey is situated in a very dangerous neighborhood, being at the epicenter of the Balkans, the Caucasus, and the Middle East. That's how they justified maintaining a large standing army, ranking second among the North Atlantic Treaty Organization (NATO) countries after the United States, in order to be able to cope with threats perceived from all directions. As a result, the defense budget in Turkey has constituted a significant proportion of government spending for decades.<sup>9</sup> Under these circumstances, Turkish decisionmakers could have justified developing nuclear weapons as both a deterrent to enemies and a way of diminishing military expenditures.

Since the mid-1980s, starting with the government of President Turgut Özal, Turkish politicians have had the ambition to elevate Turkey to the position of a regional power and a global player in world politics. From that perspective, the prestige that would be gained from nuclear-weapon capability would have made them more confident in their pursuit of assertive foreign and security policies to achieve their objective.

Moreover, the scientific and scholarly community as well as the civilian and military bureaucracy in Turkey have been generally receptive to the

idea of acquiring “nuclear power,” even if “nuclear weapons” may not have been explicitly pronounced in that context. Many scholars and experts as well as bureaucrats and politicians in Turkey have promoted plans for developing a scientifically and technologically advanced nuclear infrastructure and a complete nuclear fuel cycle apart from installing nuclear power reactors for energy generation.<sup>10</sup>

## THE FACTORS THAT KEPT TURKEY FROM GOING NUCLEAR

The foregoing brief profile suggests that Turkish political and security elites could have found justification for pursuing a nuclear weapon capability. However, they did not do this for a number of reasons. Turkey’s international considerations, such as its membership in NATO, its adherence to the nuclear nonproliferation regime, and its EU vocation would have made it difficult for Turkish decisionmakers to pursue nuclear weapons even if they had wished to do so.

Turkey has long pursued a policy of subscribing to the relevant international arms control and disarmament treaties and conventions as well as contributing to their effective implementation. This practice helped raise a cadre of civil and military bureaucrats, scholars, scientists, experts, and intellectuals who have developed a stance against the proliferation of weapons of mass destruction. Diplomats, military officers, and bureaucrats from the Ministry of Foreign Affairs, Ministry of National Defense, Ministry of Energy and Natural Resources, the General Staff, and the like, who have been involved in international nonproliferation efforts in various platforms, have developed over the years a high degree of consciousness about the possible consequences of developing nuclear weapons clandestinely. Therefore, since the 1970s, whenever plans for building nuclear power plants have come to the fore, the Turkish bureaucracy endured a certain degree of tension with respect to a number of critical decisions, such as what should be the type and/or the size of the nuclear reactors, which country should be the supplier, whether or not to invest in uranium enrichment and plutonium reprocessing in the future, and the like.

For instance, Turkey and Argentina signed an agreement in 1990 to form a joint architectural-engineering firm to develop Argentina’s modular low-power CAREM-25 reactors, one in each country.<sup>11</sup> While Turkey

agreed to provide most of the financing for the work, Argentina would provide most of the technology.<sup>12</sup> If preparations for the building of two units had gone ahead as planned, work on the first unit in Argentina would have begun in 1991, and the construction of the second unit, in Turkey, would have begun in 1992.<sup>13</sup> The long-term goal of the joint venture was to export the reactor to other nations in Latin America, Africa, and the Middle East.<sup>14</sup>

Turgut Özal who, as Turkish prime minister prior to becoming president, had corresponded and met with Argentine President Carlos Menem regarding the project and thus played a key role in obtaining the agreement. Despite the fact that high-level talks in the nuclear field had been carried out between Argentina and Turkey and had culminated in a formal document, the CAREM-25 project was canceled a year later by the unilateral decision of Yalcin Sanalan, then director of the Turkish Atomic Energy Authority. Sanalan notes that he “found the prospects of the CAREM-25 deal ambiguous” on the grounds that “CAREM-25 was too small for electricity generation and too big for research or training, however, very suitable for plutonium production” and thus a proliferation concern. Therefore, Sanalan “concluded that such an ambiguous project would decrease the chances of Turkey in its current and future quest for large-scale nuclear power plants which the country really needed.”<sup>15</sup> This anecdote, shared with the author by Professor Sanalan, may provide insights into the inner circles of the decisionmaking mechanism in the Turkish state bureaucracy with respect to the differences of opinion on sensitive issues, such as nuclear energy projects, that are still relevant today.<sup>16</sup>

A major impediment to the potential ambitions of Turkish decision-makers to acquire nuclear-weapon capabilities has been the security assurances given by NATO to Turkey since its entry into the alliance in February 1952. Article 5 of the North Atlantic Treaty signed on April 4, 1949, in Washington, D.C., constitutes the basis of the “positive security guarantees” given to Turkey by other members of NATO, that an attack on any member is an attack against all. Accordingly, Turkey’s entire territory has been covered by a nuclear umbrella that may effectively deter possible attacks from other countries. U.S. nuclear weapons that have been deployed in allied countries in Europe including Turkey have long been at the crux of the “extended deterrence” capability of the alliance.<sup>17</sup> The

NATO-wide ballistic missile defense system, known as the “missile shield,” is another form of assurance provided to Turkey by the alliance against the threat of proliferation of weapons of mass destruction and their delivery vehicles. This system is expected to become fully operational in 2018. The decision to install the essential parts of the missile shield (the radar site in Kürecik in the Malatya district in eastern Turkey) was finally made at the NATO summit meetings in Lisbon in November 2010. The radar site in Kürecik started to operate as a NATO asset concomitantly with the Chicago summit meeting of NATO in May 2012.<sup>18</sup>

A second factor that limited Turkey’s options has been its treaty obligations under the nuclear nonproliferation regime. Turkey became a state party to the NPT by signing it on January 29, 1969, and subsequently ratifying it on April 17, 1980. Turkey also concluded a “full-scope” Safeguards Agreement with the International Atomic Energy Agency (IAEA) in 1982, meaning that the agency monitors all nuclear facilities in Turkey. Eventually, Turkey joined the other international nuclear nonproliferation efforts such as the Zangger Committee and the Nuclear Suppliers Group (NSG) in 2000, and it signed and ratified the Comprehensive Nuclear Test Ban Treaty in 2001. Turkey also endorsed efforts to strengthen the nuclear nonproliferation regime and the verification mechanism of the IAEA.

Accordingly, in the 1990s, Turkey paid much attention to the proceedings of a study called “Programme 93+2” as an attempt to make IAEA safeguards inspections more intrusive, which culminated in the Additional Protocol in 1998. Turkey signed the Additional Protocol on June 6, 2000, and it entered into force for Turkey on July 17, 2001.<sup>19</sup> Turkey also co-sponsored a joint working paper by a number of European allies and submitted it to the May 2010 NPT Review Conference. The paper stated that global nuclear disarmament requires an incremental but sustained approach in which all treaty-based nuclear arms control and disarmament agreements are indispensable for the active promotion of collective security and cooperation in the pursuit of this objective.<sup>20</sup> More recently, Turkey took part in the Non-Proliferation and Disarmament Initiative (NPDI), a cross-regional, ministerial-level group initiated by Australia and Japan that focuses on practical steps with a view to taking forward the consensus outcomes of the 2010 NPT Review Conference.<sup>21</sup>

A third factor that limited the options available to Turkish decision-makers has been Turkey's candidate status before the European Union. Turkey began a "Westernization" process as early as during the nineteenth-century Ottoman Empire. The early modernization attempts in the Turkish Republic were undertaken during the 1920s with a view toward accelerating the country's transformation into a Western-style, secular nation-state.<sup>22</sup> Turkey's interest in its relations with the West gained further momentum with its admission to the Council of Europe in 1949 and to NATO in 1952. Then came the Ankara Agreement in 1963, which gave Turkey an attractive prospect to eventually become a full member of the European Union. Since 1987, when the first official application for membership was made, Turkey has been a consistent candidate for EU accession. After long deliberations, the accession negotiations between Turkey and the EU started in 2005 but soon stagnated. If and when the accession process is successfully completed, as a condition of full membership, Turkey would become a state party to the Euratom Treaty, which would permit only peaceful applications of nuclear technology.

## **U.S. NUCLEAR WEAPONS IN EUROPE AND THE POSITION OF TURKEY**

Among the key factors that kept Turkey from considering the acquisition of nuclear weapons, the impact of NATO's "extended deterrence" and the role of the U.S. nuclear weapons deployed on Turkish territory in this context deserve special attention. As of fall 2014, the state of affairs between Turkey and its Western allies is testing solidarity in a number of issue areas—including the remaining U.S. tactical nuclear weapons stationed in Europe, where Turkey and its allies may have contradicting policies.

Reports indicate that 150–200 tactical nuclear weapons belonging to the United States are still deployed in five European members of NATO: Belgium, Germany, Italy, the Netherlands, and Turkey.<sup>23</sup> Turkey has hosted U.S. nuclear weapons since the intermediate-range Jupiter missiles were deployed in 1961 as a result of decisions made at NATO's 1957 Paris summit. The Jupiter missiles were withdrawn in 1963 in the aftermath of the Cuban Missile Crisis. After that, U.S. nuclear weapons under U.S. Air Force custody remained in air bases in Eskişehir, Malatya, Ankara, and

Balıkesir, where F-100, F-104, and F-4 Phantom aircraft belonging to the Turkish Air Force were planned to deliver them.<sup>24</sup> With the end of the Cold War, most of the nuclear weapons were withdrawn from these bases. Today, U.S. tactical nuclear weapons are still stored in Turkey, albeit in much smaller numbers and in only one location, the İncirlik base near Adana on the eastern Mediterranean coast of Turkey.<sup>25</sup>

Turkey has long relied on the strong deterrent capability of NATO's nuclear strategy. Turkish officials would prefer to continue to benefit from the extended deterrence provided by these weapons stationed in Turkey. However, the positions of some European allies have not been fully compatible with that of Turkey. On February 26, 2010, the foreign ministers of Belgium, Germany, Luxembourg, the Netherlands, and Norway wrote a letter to Anders Fogh Rasmussen, NATO's secretary general at the time, indicating that they would "welcome the initiative taken by President Obama to strive toward substantial reductions in strategic armaments, and to move toward reducing the role of nuclear weapons and seek peace and security in a world without nuclear weapons." The letter also emphasized that there should be discussions in NATO as to what the allies "can do to move closer to this overall political objective."<sup>26</sup>

In response, Turkish officials warned that such an attitude would seriously damage "solidarity" and "burden sharing," two fundamental principles of the alliance that have been the basis for Turkey's agreeing to the deployment of U.S. nuclear weapons on its soil. Turkish officials, therefore, expected other allies also to continue hosting U.S. nuclear weapons on their soil, if only in symbolic numbers. In this way, Turkey would not stand out as the only NATO country in Europe that retains U.S. nuclear weapons.<sup>27</sup>

Notwithstanding the initiative of the five European allies, the Strategic Concept Document that was adopted during the Lisbon summit in November 2010 underlined that NATO would remain a nuclear alliance as long as nuclear weapons exist in the world.<sup>28</sup> Moreover, in the Deterrence and Defense Posture Review issued at the Chicago summit in May 2012, the allies agreed that the North Atlantic Council would task the appropriate committees to develop concepts for how to ensure the broadest possible participation of allies concerned in their nuclear sharing arrangements, including in case NATO were to decide to reduce its reliance on nuclear weapons based in Europe.<sup>29</sup>

Voices are still being heard in Europe suggesting that these weapons should be sent back to the United States despite the adopted document that emphasized the significance of the forward-deployed U.S. nuclear weapons on European territory. For instance, in advance of national (and European) elections in Belgium in May 2014, the Flemish socialists announced at a party congress that they would not enter a Belgian government if U.S. tactical nuclear weapons remained on Belgian territory, let alone were modernized.<sup>30</sup>

Russia's invasion and annexation of Crimea probably will end the debate within NATO over withdrawing U.S. nuclear weapons. However, if in the future the European allies decide to ask the United States to withdraw its nuclear weapons from their territory, Turkey would be left with two options: to carry the burden of forward deployment of U.S. nuclear weapons within the alliance all by itself (or perhaps with Italy) and to reverse its long-standing policy of hosting U.S. nuclear weapons and send them back to the United States. Each option is worth analyzing.

If the U.S. tactical nuclear weapons were withdrawn from other European allies, Turkish authorities, despite their declaratory policy, could welcome the continuation of deployment of these weapons in Turkey as a credible deterrent to current and potential rivals in the region. It goes without saying that the proliferation of weapons of mass destruction in the Middle East, in particular, constitutes one of the primary sources of threats to Turkey's national security and stability. Turkish officials are not fully confident that the assurances given to Turkey by NATO would be credible enough without the actual presence of the United States in the picture. Therefore, they may prefer relying on the extended deterrence provided by the United States and its nuclear weapons, whose deployment on Turkish soil would be seen as a guarantee of U.S. involvement on Turkey's side in any future contingencies.<sup>31</sup>

If Turkey decided to join European allies should they opt to send back the U.S. nuclear weapons, Turkish-American relations could be negatively affected. Nearly a decade ago, when asked about the status of U.S. nuclear weapons, Turkish officials underlined that keeping the weapons had to do with the nature of Turkish-U.S. relations and Turkey's place in the Western alliance. The deployment of tactical nuclear weapons that remained in Turkey was believed to strengthen the bonds between the United States and

Turkey, which had suffered serious setbacks due to the unfulfilled expectations on each side during and after the crisis situation in Iraq starting in late 2002.<sup>32</sup> Turkish-American bonds were severely strained after Turkey's rejection of the U.S. request to station troops on its soil in the run-up to the war in Iraq in March 2003.<sup>33</sup> Turkish officials then feared that withdrawing U.S. nuclear weapons from Turkey in the aftermath of such a delicate period would have further weakened the long-standing strategic alliance.<sup>34</sup> Hence, at a time when the two countries may need each other's tangible support in protecting their national interests vis-à-vis the current conflict-laden issues, such as Syria's civil war, Iran's controversial nuclear program, Iraq's instability, and Ukraine's ongoing crisis, sending U.S. nuclear weapons back may not hold much appeal to Turkish officials.

## **LONG-TERM RELIABILITY OF THE FACTORS THAT KEPT TURKEY FROM ACQUIRING NUCLEAR WEAPONS**

Notwithstanding the longstanding responsible state practice of Turkish governments, which joined every existing nuclear nonproliferation instrument, concerns remain about whether the next generation of decision-makers in Turkey would consider taking steps toward acquiring nuclear weapons. These concerns may be prompted, among other factors, by the stance of the Justice and Development Party (AKP) government vis-à-vis regional and global issues that exhibit notable differences in style and substance from the policies of former governments. Especially over the past five years, Turkey has followed a much more assertive foreign policy with an ambition to become a more visible player on many regional and even global issues.<sup>35</sup> Ahmet Davutoğlu, the former foreign minister who became prime minister in August 2014, considers this policy as a necessary but not sufficient condition for the realization of his government's long-term objective "to make Turkey a global power."<sup>36</sup> Western security analysts are, therefore, concerned that Turkey's state practice and the current state of affairs in its relations with the institutions mentioned above, which are seen as insurance policies against its potential inclination toward acquiring nuclear capabilities, may not remain on the same track in the medium to long term.

With respect to the assurances provided by NATO, in the eyes of many Turks, the powerful image of the Alliance has been diluted in its

transformation from a collective defense organization with a “hard power” stance, to a collective security organization with a perceived “soft power” attitude. Likewise, under the influence of anti-American sentiment, which is pervasive in the Turkish public domain lately, NATO is starting to be seen as an organization that “serves primarily the interests of the United States and helping it to establish its world hegemony.”<sup>37</sup> Traces of such an approach can be seen in the harsh criticisms leveled against the missile shield project of the alliance that required the deployment of a radar site in Turkey.<sup>38</sup>

As for the European vocation, it is necessary to underline that even though the start of the accession talks has institutionally brought Turkey closer to the EU, the optimistic mood among Turks and Europeans soon took a negative turn. Suspicions of Turkey’s suitability for membership have grown ever since.<sup>39</sup> Objections to Turkey’s membership on the basis of identity-related considerations have increased, while the arguments in favor of Turkish accession on the basis of cost-benefit calculations have weakened.<sup>40</sup> With growing societal security concerns over the existence of millions of Muslims in Europe, the EU has become increasingly reluctant to develop a strong geopolitical commitment to Turkey’s eventual accession.<sup>41</sup> Besides, the AKP government, which was commended in the West for being progressive as well as promoting the rule of law, improving human rights, normalizing troubled civil-military relations, boosting the economy, and taking genuine initiatives to solve Turkey’s long-standing conflicts with its neighbors, is now being harshly criticized in Europe. For instance, during a visit to Brussels on January 22, 2014, Recep Tayyip Erdoğan, the prime minister at the time, was reminded by European Commission President José Manuel Barroso that “respect for rule of law and independence of the judiciary [were] basic principles of democracy and essential conditions for EU membership.” Similarly, Herman Van Rompuy, president of the European Council, told Erdoğan that “it is important not to backtrack on achievements and to ensure that the judiciary is able to function without discrimination or preference.”<sup>42</sup>

Within the nuclear nonproliferation regime, meanwhile, a series of significant international developments over the past decade have cast doubts on the future prospects of the regime. These developments include North Korea’s nuclear detonations; revelations about Iran’s secret facilities suitable for fissile material production; failure to persuade all states of concern,

including Iran, to ratify the IAEA's Additional Protocol; and failure to urge the enforcement of the Comprehensive Nuclear Test Ban Treaty. Hence, the possibility of the NPT's becoming an ineffective treaty stands out as one particular reason that some in Turkey espouse the idea of having at least the basic infrastructure for nuclear-weapon capability.<sup>43</sup> Under these circumstances, while Turkey, like other states, certainly could import nuclear power plants or seek over time to indigenously produce them without intending also to acquire nuclear-weapon capabilities, suspicions often arise that dual purposes lie beyond new nuclear power programs, especially those that might include uranium enrichment and plutonium reprocessing.

## SCENARIOS ABOUT TURKEY'S NUCLEAR FUTURE

So far, in this chapter, issues concerning Turkey's official engagement with nuclear energy projects have been discussed, by and large, by relying on verifiable information, either collected by the author while conducting academic research on the subject over the past two decades, or on readily available open sources, such as academic books and journals as well as magazines and media pieces. Therefore, topics that are covered in this chapter until now have presented the author's interpretation of various features of Turkey's official stance toward the proliferation of nuclear weapons. Special attention has been paid to staying away from speculative comments with respect to the strategies that could have been adopted by Turkish governments.

This section, however, will attempt to discuss a number of scenarios<sup>44</sup> concerning the possible courses of action that Turkish policymakers might consider adopting in case they decided to pursue nuclear weapons in response to a number of contingencies. Such contingencies include Iran manifesting its nuclear-weapon capability, which would embolden the clergy in their attitude toward Turkey; aggravation of the security situation in Iraq and Syria, with both holding Turkey responsible for such an outcome; worsening of relations with Russia due to its mounting pressure on Turkey to prevent the passage of American naval vessels through the Turkish Straits on the grounds of the provisions of the 1936 Montreux Convention;<sup>45</sup> deterioration of relations with the European Union due to European leaders' severe criticism of undemocratic practices of Turkish

governments; and waning of the U.S. commitment to the strategy of extended nuclear deterrence. This list of contingencies can be further extended, as the geopolitical and geostrategic environment in Turkey's neighborhood is highly conducive to unwelcome developments, as most recently seen in Crimea.

In the event of one or more of these contingencies taking place, the scenario exercised here would assume that the Turkish ruling elite might decide to develop a nuclear-weapon capability as a countermeasure against the threats posed to Turkey's territorial integrity and political sovereignty in the medium to long term. Should this be the case, several critical questions would then emerge: Who would be in charge of the nuclear-weapon development project? What would be the strategy for evading Turkey's commitments under the nuclear nonproliferation regime? Which capabilities and technologies would have to be acquired and/or indigenously developed for becoming self-sufficient in the long term? Who could be the international partners?

Answers to these and other hypothetical questions may be given only by the authorities of the institutions that would be involved in such a project. Hence, the following paragraphs can only speculate about what the possible course of action might be.

### **Who Would Be in Charge of the Nuclear-Weapon Development Project?**

It would be safe to argue that any decision to pursue nuclear weapons would be made first by consensus at the highest echelons of the state mechanism. Then, the National Security Council meetings, chaired by the president and attended by the prime minister as well as a few key ministers, such as foreign and defense ministers and their top bureaucrats, would most likely be the exclusive venue for high-level deliberations on alternative strategies. These meetings would also be appropriate for inviting a limited number of scholars, scientists, and experts whose opinions would be expected to help the top executives to crystallize their decisions about whether to stay in the NPT while working on a weapons program; which technologies to acquire and/or develop indigenously; which country or countries to collaborate with in the international arena, and so on. Of course, inviting such people

might compromise secrecy. But the law forbids revealing information about meetings taking place at the National Security Council.

By virtue of the role that it used to play until the democratization of civil-military relations in Turkey, the National Security Council also would act as an interim general secretariat, responsible for coordinating the agenda of the meetings and keeping their records, at least until the ultimate strategic decision would be made as to who would be in charge of the project. This last point would be crucial, and the answer would depend on who is president and/or prime minister at the time the project would be under consideration. Turkey is a parliamentary democracy, and despite being the “commander in chief” according to the Turkish constitution, the president was usually considered as *de facto* subordinated to that of the prime minister when it comes to critical executive decisions (an exception being if the president is a charismatic leader like the late Turgut Özal or the current President Recep Tayyip Erdoğan).<sup>46</sup> According to the constitutional amendments of 2010, Turkey’s president will henceforth be elected by popular vote, as was the case on August 10, 2014. This may change the power relationship between the president and the prime minister and may give an enhanced sense of policy initiative to new presidents. The prime ministry might then act only as the executive branch carrying out decisions that would be supervised by the president. Alternatively, the prime minister could lead the project. Charisma gains currency in this equation because it would be crucial both to motivate the top bureaucracy to perform its best as well as to achieve harmony within the state mechanism where diverging views and opposition to the project would be likely.

Not everyone who would be involved in these deliberations would be like-minded and fully support the idea to develop nuclear weapons. Opposition would most certainly come, primarily from the career diplomats in the Ministry of Foreign Affairs who would inform the top decisionmakers about the possible serious consequences of Turkey’s violation of its treaty obligations under the NPT, not to mention the degree of damage that such a move might cause to political, economic, and military relations with the Western alliance in the first place.

The General Staff, meanwhile, would try not to project an image of being an adamant supporter of the nuclear-weapon program. This would be

done as a cautionary attitude, considering a possible backlash in due course in case the politicians reversed their decision, either under the constraints that they would face in the international arena, or due to a change in the government and/or political leadership who may want to cancel the project altogether. The General Staff also would be cautious about the sensitive nature of military relations with NATO in general and the United States in particular. Yet, the degree of opposition, if only sporadic, that could come from the top brass might not be decisive enough to change the course of actions if the country proceeded down the road toward nuclear weapons.

The National Intelligence Authority, even though it is represented in the National Security Council meetings at the undersecretariat level, recently has started to play a much more important role in the foreign and security domains, just as in the case of the Central Intelligence Agency of the United States and the Secret Intelligence Service (MI6) of the United Kingdom, due to the restructuring of its departments as well as its mission and its vision. The National Intelligence Authority would probably be at a standby position at all times with a view to establishing contacts for the procurement of the material and technology necessary for the advancement of the project as well as to provide, among others, counterespionage service to protect the scientific and technical staff involved in the project.

In addition to these institutions that would constitute the backbone, or the “A-Team,” of the project, select ministries, such as the Ministry of Energy and Natural Resources, and government institutions, such as the Turkish Atomic Energy Authority, would be the tip of the iceberg—officially responsible for the execution of the nuclear project in the open in accordance with Turkey’s treaty obligations, considering that Turkey would stay in the NPT at least until it was within three months of being able to produce a bomb, when it could give notice to withdraw.

## **What Would Be the Strategies for Acquiring Necessary Capabilities?**

For any country whose decisionmakers would consider developing an elaborate nuclear program that would enable them to divert peaceful applications to military applications in the future, two different strategies may be contemplated. The first would be to acquire the necessary technological infrastructure and scientific skills through legal transactions from

supplier countries by staying in the NPT and then to walk away from the treaty obligations after having acquired the advanced capabilities necessary for a self-sufficient nuclear-weapon development program. The second would be to collaborate with one of the major nuclear-weapon-capable states, possibly one that would not be bound by NPT obligations and also willing to provide the technological infrastructure as well as the scientific skills necessary to build nuclear weapons clandestinely.

In the case of Turkey, policymakers might consider that a feasible option would be a combination of the two alternatives, which would mean to acquire, on the one hand, some necessary capabilities through legal transactions from the supplier states, as well as to acquire, on the other hand, scientific skills and technological parts that are necessary to build facilities for uranium enrichment and/or plutonium reprocessing, which would probably be denied to Turkey by its allies in the West. Recent developments taking place in the context of the Nuclear Suppliers Group (NSG) meetings only enhance this view.

For instance, when the United States proposed limiting transfers of enrichment and reprocessing technologies from the members of the NSG to states that do not already possess this technology, the NSG drafted a “clean text” in 2008 that attempted to take into account all viewpoints and finally receive the support of all members. The clean text included both objective and subjective criteria. The objective criteria were mandatory conditions that suppliers would have to take into account before completing an enrichment and reprocessing transfer. The subjective criteria were additional criteria that suppliers could take into account, such as those proposed earlier by the United States regarding considerations of domestic and regional stability; prior agreement to refrain from acquiring enrichment and reprocessing capability; a coherent reason for desiring the technology; and whether a transfer would be used for peaceful purposes. In addition to the opposition voiced by Brazil and Argentina, Turkey opposed the subjective criteria of the clean text. In particular, Turkey took issue with whether a plausible reason exists for a transfer of sensitive nuclear technology to take place, and the impact of the transfer on the country and the region’s stability and security.<sup>47</sup> Turkey felt that it would be viewed as being in an unstable region, and therefore it would be denied transfers regardless of its nonproliferation record and commitments.<sup>48</sup>

Turkey's position was that the NSG should not victimize any country simply because its neighbors are considered problematic.<sup>49</sup> Turkey also opposed the "black-box" requirement for trade of sensitive technology,<sup>50</sup> which means that the transfer must take place under conditions that will not permit or enable replication of the technology.<sup>51</sup> As outlined in a recent Centre for Economics and Foreign Policy Studies report,<sup>52</sup> although Turkey has invested in a number of technologies needed to form the basis of a civilian nuclear energy program, its lack of commercial scale enrichment and reprocessing technologies make it unlikely that Turkey could quickly develop a nuclear weapon. The report also states that given the nascent state of its nuclear industry, as well as the difficulties involved with the development of commercial scale enrichment and reprocessing, Turkey would likely have to rely on foreign suppliers for fuel cycle technology.

### **Would Turkey Imagine Putting Weapons on Missiles?**

Within the context of the scenario outlined here, there is also need for a discussion about whether Turkey would want to put weapons on missiles, and if so, which ones would be feasible.<sup>53</sup> At present, Turkey's missile capability is limited and consists of short-range rockets and missiles. Turkey had initially sought to partner with the United States for the co-development of a system similar to the U.S. Army's Tactical Missile System (ATACMS), but the two sides could never reach an agreement on the terms of technology transfer. Turkey purchased 72 MGM-140A ATACMS surface-to-surface missile batteries from Lockheed Martin in 1996. The missile has a 300 kilometer range and is outfitted with a Global Positioning System-aided inertial guidance system. With the assistance of technology transfer from Chinese companies, Turkey first produced the 100-km range T-300 Kasırga (Hurricane) artillery rocket. Turkey and China also cooperated on the development of Roketsan's J series short-range ballistic missiles. The J-600 T Yıldırım (Thunder) is based on China's WS-1 unguided rocket system. The missile is reported to have a range of 150 kilometers with a warhead weighing 480 kilograms. It is reported that the Turkish Armed Forces have six batteries in operation.<sup>54</sup>

Turkey is keen on taking a longer-term approach to its missile production programs and aims to develop the capability to manufacture the missiles locally. Therefore, Turkey is likely to continue in its efforts to secure

favorable technology transfer agreements from foreign suppliers, rather than simply opt to purchase a slew of missile systems without receiving any co-production or transferred technology in return. In December 2011, then prime minister Erdoğan reportedly called upon Turkey's defense industry to develop the capability to produce long-range missiles. Comparing Turkey's arsenal to Iran's, Erdoğan noted that Iran has missiles with a range of over 2,500 kilometers, while Turkey's missiles are limited to 150 kilometers.<sup>55</sup>

The Turkish Armed Forces have reportedly begun working on the nation's first project to develop an intercontinental ballistic missile. A decision to launch the project was made in a meeting of the Defense Industry Executive Committee, headed by Erdoğan and General Necdet Özel, chief of the General Staff. The committee decided to form a satellite launch center that would have a twofold effect on Turkey's aerospace and military endeavors. First, the center will enable Turkey to place its own satellites in orbit, and second, the center will allow the Turkish military to launch missiles that can navigate outside of the Earth's atmosphere. Attaining an intercontinental ballistic missile launch capability is reportedly the chief aim of the satellite launch center. The Turkish Defense Ministry, the Undersecretariat for Defense Industries, and the Scientific and Technological Research Council of Turkey (TÜBİTAK) have been jointly working on the project for some time. The report said Turkey could cooperate with an undisclosed Eastern European country to develop the satellite launch center.<sup>56</sup>

### **Who Could Be the International Partners?**

In a scenario where Turkish decisionmakers are presumed to opt for a nuclear-weapon program, it is clear that Turkey would need international partners to advance its scientific and technological capabilities also in enrichment, reprocessing, weapons design, metallurgy, and other areas from the level where they are now to a level where developing nuclear weapons would be within its reach. In the scientific domain, Turkey had indeed a large number of nuclear engineers and technicians who earned their degrees in Turkey as well as abroad, from the 1970s onward when Turkey launched its first plans to build nuclear power reactors, none of which, mainly due to political problems, was ultimately realized.<sup>57</sup> Authorities argue that there are enough nuclear engineers and technicians,

though most of them are scattered around the world due to the lack of job opportunities in Turkey—enough, anyway, for running at least two nuclear reactors and the related facilities. Added to these, just as Iran did in its Bushehr power plant deal with Russia, Turkey started to send approximately 150 students to Russian institutions to pursue graduate degrees in the nuclear field. The figure is expected to reach 600, including undergraduate students.

In addition to running the reactors, skilled personnel will be needed for doing design and construction of all the components for nuclear weapons. Yet, the formation of a cadre of scientists who would be responsible for the execution of the project may not be the biggest problem. Acquisition of sensitive technologies, such as uranium enrichment, would necessitate outside support, and the most likely candidate, as has been the case with Iran's nuclear program, would be Pakistan.

Before counting on any support that might come from Pakistan, it must be noted that Islamabad has apparently committed not to proliferate anymore, especially since the A. Q. Khan incident.<sup>58</sup> Pakistani scientists and their connections are watched very closely in this domain. Yet, it must also be taken into consideration that Turkey and Pakistan have historically developed fairly strong relations. For almost any Turkish citizen, Pakistan used to be the one and only country truly friendly to Turkey. Revolutionary thoughts and the principles of Mustafa Kemal Atatürk, the founder and the first president of the Republic of Turkey, inspired the Pakistani people in their fight for independence against the British. As an indication of the countries' ties, Atatürk's name has been bestowed on a variety of institutes, libraries, and the most beautiful districts in Pakistan's big cities. Turkey's historic relations with Pakistan gained momentum with the 1964 Regional Cooperation for Development agreement that brought together Turkey, Iran, and Pakistan. The warm relations were further intensified in many respects in the aftermath of the military coup in Turkey on September 12, 1980. The military leaders of Turkey and Pakistan, President General Kenan Evren and President General Zia ul-Haq, respectively, paid a series of visits to each other's country until the latter was killed in a plane crash on August 17, 1988. These ceremonial visits increased the magnitude of sympathy and of trade and cooperation in many fields, including the civilian and military spheres, are fertile soil for rumors to grow. Hence, when

NATO blocked Pakistan's enrichment program in the early 1980s, President Zia ul-Haq reportedly opened talks with Turkey, taking advantage of his "brotherhood" with his Turkish counterpart Kenan Evren. At the same time, Greek Prime Minister Andreas Papandreou reportedly said that "Pakistan expected Turkey to act as a transshipper of material for a nuclear bomb and would reciprocate by proudly sharing the nuclear bomb technology with Turkey."<sup>59</sup> At present, both Pakistan and Turkey are disturbed by the fact that Iran has advanced its nuclear capabilities and is increasingly closer to building nuclear weapons. This may well be a reason for Turkey to expect Pakistan, which has mastered its nuclear-weapon development capabilities, especially uranium enrichment technology, to satisfy its expectations for technology transfer in the nuclear field.

Brazil could be another candidate with which Turkey could collaborate in the area of acquisition of sensitive technologies. The two countries joined forces in May 2010 to negotiate the "Tehran Declaration" that aimed at lending transparency to Iran's controversial nuclear program. Brazil's significance, from Turkey's perspective, also stems from its history of seeking nuclear weapons in the 1970s, when it was entered in a stiff race with its neighbor and rival Argentina. As a result of the concomitant transition to democracies from dictatorships, the two countries have signed the Quadripartite Agreement with IAEA and joined the NPT, which freed them from their ambitions to build nuclear weapons.<sup>60</sup> Yet Brazil maintains its powerful stance against the provisions of the Additional Protocol of the IAEA. Considering that Brazil is a member of the NPT and also the NSG, a collaboration between Turkey and Brazil could be similar to the one in which Russia supplies Iran with sensitive technologies within the context of the rights of non-nuclear-weapon states envisaged in Article IV of the NPT. The Brazilian Navy, which started a nuclear propulsion program in the early 1980s, has developed enrichment technology using centrifuges. Even though most enrichment of the fuel fabricated in Brazil for its nuclear reactors is undertaken by Urenco in Europe or in the United States, enrichment at the Aramar Experimental Center in Iperó (São Paulo state), which remains a naval facility, continues, and it is reported to be at a 5 percent U-235 level.<sup>61</sup> So Brazil might provide a basis for Turkey to acquire enrichment technology that may be eventually developed indigenously by Turkish engineers and technicians.

Japan may also be a candidate for supplying Turkey with sensitive technologies. In early 2014, there were conflicting reports about possible collaboration between Japan and Turkey in the area of uranium enrichment and plutonium reprocessing. During Prime Minister Erdoğan's meeting with his Japanese counterpart Shinzo Abe, a \$22 billion deal was signed in Tokyo on the nuclear plant project, planned to be built in Inceburun on the Black Sea coast by a joint venture involving Japan's Mitsubishi Heavy Industries. The Japanese daily *Asahi Shimbun* reported on January 8, 2014, that a senior Japanese Foreign Ministry official claimed that "upon Turkey's demand a clause, which allows Turkey to enrich uranium and extract plutonium, [was] added in the nuclear agreement signed by the two nations."<sup>62</sup> Soon after, however, Turkey ruled out the prospect of enriching uranium as part of its nuclear program. Officials said "the government of Prime Minister Erdoğan [would] not develop uranium enrichment capability" and that "Turkey did not reach agreement with Japan to produce nuclear fuel." On the same matter, Turkish Energy Minister Taner Yıldız said that "Turkey [did] not have any project regarding nuclear fuel and uranium enrichment." In a briefing on January 8, 2014, he acknowledged that "Turkey sought to learn to produce nuclear fuel for its four planned reactors." But, he said, "Ankara's interest [did] not extend to establishing a uranium enrichment sector."<sup>63</sup>

## CONCLUSION

Based on this scenario, which is presented as a speculative intellectual exercise, even if one considers for a moment that Turkey decided to develop nuclear weapons and also managed to get the support of a nuclear power, or that it successfully established a clandestine nuclear-weapon procurement network, what would be the role of nuclear weapons in Turkey's security and foreign policies? Would nuclear weapons enhance Turkey's security? Or would they simply hurt Turkey's interests?

Any attempt to illegally pursue, let alone acquire, a nuclear-weapon capability would be extremely damaging to Turkey's vital interests. Turkey is passing through a difficult domestic and international political conjuncture in which any number of sensitive issues (social, economic, political) may be carefully exploited by its rivals. Even if one considers for a moment

that Turkey managed to acquire a nuclear-weapon capability, under which scenarios and against whom would these weapons have added value in Turkey's foreign and security policies? It is difficult to give a meaningful answer to this question.

Of Turkey's immediate neighbors, Iraq and Syria are both deeply immersed in internal conflicts, and the future of these regimes is bleak. Neither is likely to pose a threat that Turkey could not deal with by non-nuclear means. As for Iran, even if its nuclear-weapon capability someday upsets the balanced relations with Turkey, that alone may not be justification for Turkey's countering with nuclear weaponry and going through all possible hardships to get there. And in any case, a nuclear-weapon-capable Iran would most likely be dealt with collectively by the rest of the international community, the United States and Israel being at the forefront.<sup>64</sup> Greece and Armenia are other potential countries with which Turkey had, and may have, problems in its foreign relations. While Greece and Turkey have fought wars in the past and, therefore, Greece might be seen as a potential threat by Turkish security elite, there is no possibility that Armenia would ever present a military threat to Turkey. Moreover, the EU membership of Greece and the powerful Armenian diasporas in the United States and Europe would most likely nullify the nuisance capability of Turkey's nuclear power against these countries. In addition, Turkey has good neighborly relations with the rest of the countries in its environs, such as Bulgaria, Romania (both now NATO allies), Ukraine, Georgia, and Russia (which has a large nuclear arsenal). All told, it is difficult to conjure a dispute, either internally or in the international community, in which Turkey's use of nuclear weapons would be justified.

There is, therefore, no feasible scenario under which Turkey could expect to effectively use its nuclear power status, if and when achieved. However, there are scenarios in which Turkey's vital interests would be seriously damaged simply because it would have attempted to acquire a nuclear-weapon capability.

Bearing in mind the fact that the "top-secret" meeting of Turkey's foreign minister with top bureaucrats from the military, diplomatic, and intelligence branches of the Turkish state apparatus in his "secure office," where they discussed alternative strategies to deal with the delicate security situation in Syria, leaked to the press on March 27, 2014, keeping a

clandestine nuclear-weapon development project away from the watchful eyes of the international community may be next to impossible.

Even though there is talk in Turkey about why Turkey should develop nuclear weapons, among those who approach the issue from the perspective of national pride and prestige as well as security, it is not clear whether they are aware of the possible serious consequences of such action, which would mean, among others, violation of Turkey's international obligations. Secretly going down this path and being discovered could cost Turkey not only international prestige, but also quite possibly NATO guarantees, including the U.S. nuclear umbrella.

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