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Security and Defense Dilemmas in the Middle East: The Nuclear Dimension

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1. Introduction

The security dilemma arises from the ambiguity of military means, postures and foreign policy intentions. In both the international and regional systems, states keep careful watch on the military preparations and foreign policies of other states before deciding how to respond to these preparations and intentions. On the other hand, the defense dilemma revolves around the possible security implications associated with the holding of military means by states. Technological developments have made modern and military means more and more lethal and destructive. This is especially true for weapons of mass destruction (WMD), whose actual use threatens inflecting unprecedented level of destruction and devastation on the environment in which they are employed, far beyond any acceptable measure.

The Middle East, for more than half a century, has been confronted by the two dilemmas of security and defense without being able to find a way out of them. It became a region of concern with regard to not only nuclear, chemical and biological weapons and their delivery systems, but also as the World's largest recipient of conventional weapons. Based on statistics, the Middle East with only 8% of world population, has witnessed 25% of all the World's armed conflicts since 1945. It has known all sorts of conflicts such as regional wars, wars of intervention, and civil wars with devastating consequences on the human and material resources of the region. These conflicts were responsible of more than one million fatalities, \$450 billion of financial cost and millions of displaced persons. The Arab-Israeli wars in 1948, 1956, 1967 and 1973 were alone responsible for 200,000 causalities, \$150 billion of

financial cost, and 3 million displaced persons. Most notably in the past two decades the region witnessed two major wars in the Persian Gulf: the Iraqi-Iranian War (1980 - 1988) and the Second Gulf War of 1991. The two wars revealed the considerable proliferation level of WMD and ballistic missiles and their impact on the Middle East security and stability.

Israel was the first state in the region that launched plans pursuing an independent nuclear and missile capability. In the fall of 1956, Israel attacked Egypt with prior agreement with France and Britain in order to provide the two European nations with the pretext to occupy the Suez Canal zone. In the same period of time, France agreed to provide Israel with a 24mwt reactor and to build a chemical processing plant at Dimona, which became the foundation of the Israeli nuclear program. Intelligence and expert reports estimate that Israel has produced 100 to 200 nuclear devices including warheads for its mobile Jericho-1 and Jericho-2 ballistic missiles and for delivery by aircraft, in addition to other tactical applications. ²

Israel has long been considered the only nuclear-weapons-capable state in the Middle East, yet it has not overtly demonstrated a nuclear capability, preferring instead a policy of "nuclear ambiguity". The Arab states perceive the Israeli nuclear capability as a means of deterrence, and also as a means of potential use in preemption strike missions. Iran has been also suspected as having chemical and biological weapons, and conducting nuclear research efforts. Iraq's massive pre-Gulf War efforts in the WMD domain are now suspected to allow Iraq for a new start once the international inspection and US pressure cease to act. Syria, Libya and Egypt have been also reported to possess chemical warfare capability.³

The Middle East has entered a new period of uncertainty after the 11th of September tragic events involving the terrorist suicidal attacks on the twin towers in New York and on the Pentagon in Washington. The Middle East is not far from these events. The suspects are likely from the region, and the "root causes" of the crisis are clearly linked to the region's security dilemmas. One of the important fallouts of 9/11 is that terrorists and extremists may also acquire WMD capability including nuclear one.

Bearing in mind all these intersecting factors, the nuclear threat in the Middle East have not been perceived alone but rather linked to other dangers of WMD and their delivery systems and conventional military balance. It should also be seen from the perspective of perceived intentions and accumulated historical practices. The conflict pattern in the Middle East, while attracting the involvement of major powers, is basically regional. The possible ambitions of the countries in the area to acquire nuclear weapons are rooted primarily in this regional context. The nuclear dilemma in the Middle East cannot stand-alone; it should not be also left forever without solution,

only with providing vision and hope for the peace process the dangers of WMD including nuclear weapons could be brought under control.

This paper provides a close focus on the Egyptian and Israeli position concerning the nuclear problem and the associated weapons of mass destruction proliferation issues in the Middle East. It also suggests some thoughts of a possible road map to deal with the proliferation issue targeting at the end freeing the Middle East from all weapons of mass destruction. The process allows certain role for the "no-first-use" policy in the interim initial phase of the process with the aim to building confidence and preventing regional political deterioration.

2. Evolution of the Egyptian position

After the end of World War II, the Egyptian attitude towards arms control was determined by two sets of conditions, which called for two differing, and sometimes contradectory arms control policies. The first stemmed from Egypt's position as a Third World country, with all the attendant political, economic and social problems, and as one of the founders of the United Nations (UN) and a leader in the non-aligned movement. The second was a result of Egypt's leadership position in the Arab World.⁴

The first set of conditions led to a policy of strong support for all visions of disarmament, non-armament and arms control. Throughout both the UN and non-aligned forums Egypt called and voted for a complete and comprehensive dismantling of conventional as well as non-conventional (nuclear, chemical and biological) weapons. Throughout most of the cold war era the global arms race was considered as draining resources that should be shifted towards world peace and development.

On the regional level, however, the Egyptian position was conservative, restrictive and skeptical. At the 17th session of the UN General Assembly (1963), Egypt suggested nine conditions for establishing nuclear weapon-free zone (NWFZ) in the Middle East. These conditions reflected Egyptian fears of foreign domination, interference in its internal affairs and high sensitivity over the issue of "sovereignty" in any arms control measures. At the heart of this position were the Arab-Israeli conflict and the concept of defensive and just war. From 1948 onwards, Israel was perceived as an aggressor on the Arab lands. For Egypt, this aggression accelerated in the mid-1950s as a result of the February 1955 Gaza raid and became particularly significant in 1956 and 1967 when Egyptian territories came under direct Israeli occupation. Within this context any arms control on the Middle East regional level meant Egyptian acceptance of an unacceptable status quo.

With continued western support to Israel in the area of armament, Egypt began to fear that arms control arrangements in the Middle East would be concerned only with restricting Arab and Egyptian capabilities, particularly in the nuclear field, while allowing Israel to get away with both its territorial gains and its achieving conventional and nuclear superiority. In the late 1960s and early 1970s, therefore, Egypt linked its acceptance of arms control arrangements in the Middle East with the right of self-determination (the Palestinian question) and the right of self-defense. Furthermore, Egypt called for international control over Israeli nuclear reactors and total ban on exporting fissionable material to Israel.⁵

After the 1973 Arab-Israeli War, the Egyptian position on arms control issues began to shift as a result of the change in Egypt's leadership from President Nasser to Sadat and the emerging peace process between Israel and Egypt. Sadat realized that reaching a settlement to the Arab-Israeli conflict is a precondition for Egyptian development. To achieve this goal, Sadat concentrated his energy towards enhancing US-Egyptian relations and to foster a peace process with Israel. He worked hard to change the Egyptain domestic, regional and international environment in a way conductive to peace. Changing Egyptian attitudes towards arms control arrangements was one of the ways of realizing his aims. ⁶ Therefore, in the UN and non-aligned movement Egypt became supportive of NWFZs, verification, inspection arrangements and confidence building measures (CBMs). Furthermore, Egypt and Iran introduced a resolution at the 29th session of the UN General Assembly (1974), calling for the establishment of a NWFZ in the Middle East. The resolution was adopted at the UN General Assembly by a majority of 138 members, with only Israel and Burma abstaining. From 1980 onwards, there was no opposition to, or abstention from it including Israel.⁷

During the debates on the NWFZ resolution, Egypt stressed four basic principles: (a) all states of the region should refrain from producing, acquiring and possessing nuclear weapons; (b) the nuclear weapons states should refrain from introducing nuclear weapons into the area or using nuclear weapons against states in the region; (c) an effective international safeguards system affecting both the nuclear weapon states and the states of the region should be established; and (d) the establishment of a NWFZ in the Middle East should not prevent parties from enjoying the benefits of the peaceful uses of atomic energy, especially for economic development.⁸

In fact, Egypt has gone as far as taking unilateral steps towards arms control and considered the Egyptian-Israeli Peace Treaty in 1979 as a way to curtail, if not to eliminate, the Israeli nuclear arsenal. Although this did not materialize, Egypt ratified the Non-Proliferation Treaty (NPT) in 1982, and in 1986 froze all domestic nuclear programs. Egypt then called in different forums for the establishment of NWFZ in the Middle East. During the Paris Conference on chemical weapons in January 1989,

Egypt supported multinational efforts to impose a total ban on chemical weapons, but asked that any chemical weapons convention should include effective security guarantees for its members, not only against the use or the threat of use of chemical weapons, but also against the use or the threat of use of any weapons of mass destruction. Nuclear weapons countries refused to accept this linkage. The Egyptian position was based on a plan put forward by President Mubarak, which called for an agreement making the Middle East free of all weapons of mass destruction.

In spite of the peace treaty between Egypt and Israel, the Israeli behavior continued to cause Egypt discomfort. With its southern flank secured, in 1982 Israel turned its attention to its northern flank and invaded Lebanon. Israel in addition increased its national security domain to cover an area stretching from Morocco to Iran. More worrisome to Egypt, however, has been the Israeli arms buildup. Israel became the only nuclear power in the Middle East despite forecasts in the 1970s that more than one country would have nuclear weapons. Israel also intensified its quantitative and qualitative edge in conventional weapons through working to possess diversified family of delivery systems including advanced aircrafts, missiles and submarines that are capable reaching any of the Arab nation capitals. Finally, during the 1980s Israel introduced the arms race in space.⁹

Israel conventional and unconventional arms superiority in the Middle East triggered a new phase in the regional arms race. Countries such as Syria, Iraq, Iran and Libya started to build non-conventional mass destruction capabilities such as chemical and biological weapons. ¹⁰ In addition to Saudi Arabia, these countries also acquired or developed missiles of various kinds. Egypt, too, has participated in this deadly race.

The Egyptian endorsement of a NWFZ in the Middle East reflects the growing realism in Egyptian politics internally and externally. There is a lack of consensus among the Egyptian elites over the strategic value of acquiring nuclear weapons capabilities. In the 1960s, Egypt was firmly committed to the search for strategic nuclear balance with Israel. By the 1970s, however, Egypt had become less enthusiastic about the issue. A new view emerged that possessing nuclear weapons had no strategic value because Egypt could not use them in military confrontation with Israel, where Palestinian Arabs live and many surrounding Arab countries would be affected by nuclear fallout.

The establishment of the ACRS working group in October 1991 as a multilateral forum for Arms Control and Regional Security was a direct result of the Madrid conference and the American military campaign in the Gulf War. The establishment of the ACRS meant an acceptance of the "regional" approach to arms control but it also revealed the fundamental differences between Egypt position and the Israeli one about how to address the larger issues of arms control. By 1995, it became evident

that the ACRS forum was incapable of functioning as a substantive arms control mechanism. In fact, the ACRS process had broken down primarily due to major disagreements among the parties over the nuclear issues. The negotiations showed that Arabs and Israelis have opposite interests, approaches, priorities, and agendas of arms control, and in particular on the nuclear issue. By 1995-96, in the wake of the Egyptian-Israeli confrontation over the issue of the NPT extension, it became evident that the ACRS process had reached a point of complete impasse. 11

The most elaborate Arab critiques of the Israeli nuclear doctrine come from the Egyptian Foreign Ministry. It has been based on the priciple of nondiscrimination which is antithetical to the notions of "exceptionalism" that Israel has utilized to defend its nuclear policy choices. The Egyptian military have similar concerns and unlikely to accept a permanent Israeli monopoly of nuclear weapons in the region. Moreover, and fuelled by the deterioration in the peace process, the issue of Israel's nuclear monopoly has become important in the domestic political discourse in Egypt and in other Arab countries.

3. Is the Israeli bomb for deterrence or coercion?

For Egypt and other Arab states, the Israeli nuclear capability is perceived not as a deterrence force, but as one of coercion. It is considered a destabilizing factor in the Middle East triggering arms race and weapons of mass destruction proliferation. The peace process with Israel with its ups and downs and setbacks did not end the Arab fears concerning Israel. These fears are based on political as well as military reasons.

Politically, Israel continues to have a fanatic, fundamentalist right wing, supported by a considerable portion of its public. This wing refuses to withdraw from the Syrian occupied territories and puts obstacles on the road to implementation of the Palestinian-Israeli agreements. The assassination of the Israeli Prime Minister Yitzhak Rabin is a testimony to this reality. Military superiority and the use of force are the right wing parties preferred means to achieve their political objectives.

Militarily, Israel has secured for itself a position of superiority in both conventional and non-conventional weapons. Israel's nuclear arsenal and its expanding space-based surveillance system have had a profound impact not only on the strategic balance between Israel and the surrounding Arab countries, but also between Israel and other countries in the Mediterranean region. Israel has a sophisticated nuclear military capability; active chemical weapons program and biological warfare activities reportedly conducted at the Biological Research Institute in Nes Tziyona. Israel missile capabilities are ranging from theater ballistic missiles to orbital delivery systems. Some reports refer to Jericho-3 program under development using the Shavit system technologies with range up to (4800 km/1000kg). Most of these systems are

thought to be "nuclear capable". 14 Israel is also building small satellites based on its Ofeq spy satellite design with ground resolution around 1.5 meters, which means the ability of identifying military valued objects existing on the Arab territories. 15

From an Egyptian national security stand point, Israeli nuclear capability should be understood within the framework of the Israeli intentions determined by its politics, its superiority in conventional and non-conventional weapons over all its potential adversaries, and the military constrains imposed by the peace treaty on the Egyptian sovereignty in Sinai. This imbalance in itself makes Egypt totally dependent on Israeli good intentions not on a system of balance of power that guarantees military stability. It has to be kept in mind that Israel had attacked Egypt in liaison with colonial powers in 1956 and alone in 1967, which led to the Israeli occupation of Sinai twice in a little more than decade. In both occasions, Israel claimed parts of Sinai, and Egypt had to pay a heavy price for the Israeli withdrawal in terms of its dignity, development, and war costs.

The case of "Taba" presents a stark example indicating that territory not security or survival that drives the Israeli policy. On April 25, 1982 in the course of final withdrawal from Sinai, Israel raised problems concerning the placement of border benchmarks and refused to withdraw from a peice of land called Taba. During the negotiations to solve this problem, which lasted "three years" to send the case to arbitration, Israel built Sonesta Hotel, a tourist village and a police station violating an agreement not to change the status quo. On September 29, 1988, the international Arbitration Tribunal ruled that Taba is an Egyptian territory. Four members of the arbitration panel voted in favors with one member i.e. Israel, voting against.

The same trend continues with the Palestinians after Oslo when Israel allowed accelerating building of new settlements in the occupied territories in the West Bank and Gaza.

In the case of nuclear monopoly deterrence will be only dependent on the political decision of the state having the bomb not on other elements of strategic calculations outside the realm of the nuclear state. Hence, the Israeli argument that its nuclear weapons capability is for absolute deterrence and "last resort" weapon is not convincing because it stands from the position of superiority. Under this case other countries in the region will be tempted to seek balance through clandestine efforts to acquire nuclear weapons or other types of mass destruction weapons.

According to some analysts Israel needs 30 to 40 nuclear bombs to destroy all imaginable targets in most of the Arab countries and return them back to the stone ages. However, all intelligence estimates conclude that Israel has no less than 100 nuclear warheads and this number can go to 200. This discrepancy between capabilities and needs raises serious doubts about the credibility of the Israeli intentions. Reports indicate that Israel has developed tactical nuclear weapons, artillery shills, and perhaps nuclear mines. This might be tempting to use in the battlefield under circumstances of stress and uncertainty. As low yield tactical weapons do not endanger Israel if used against neighboring states, the decision to use them might be easier to make than the case with more powerful strategic weapons.

Possessing an overwhelming nuclear superiority allows Israel to act with impunity even in the face of worldwide opposition. A case in point might be the invasion of Lebanon in 1982, led by Ariel Sharon, which resulted in 20,000 deaths. Another major use of the Israeli bomb is to compel the US to act in Israel's favor, even when it runs counter to its own strategic interests. During the 1973 war, Israel used nuclear blackmail to force Kissinger and Nixon to airlift massive amounts of military hardware to Israel ¹⁶

4. The Israeli Position

There is no more controversial issue in Israel than its nuclear deterrent and its policy of ambiguity. Many details of Israel's nuclear weapons program and its delivery systems are uncertain and speculative. Israel has long maintained that "it will not be the first to introduce nuclear weapons into the Middle East". This declaration was adopted by the Israeli leadership between 1967-73 and accepted by the US as a strategy of ambiguity. Even after the dramatic revelations in 1986 of nuclear technician Mordechai Vanunu, Israel's nuclear status is still regarded as inaccessible. 17

A large number of western analysts see the culture of opacity is rooted in the fundamental Israeli perceptions that developed over decades of the Arab-Israeli conflict. This culture is based on the following:

- Nuclear weapons are vital to Israel's security.
- Arabs should not be allowed to obtain these weapons.
- Israel should be allowed to keep a nuclear monopoly.
- Nuclear issues must be kept out of normal discourse and the whole issue should be left to nuclear professionals.
- The opacity policy has served Israel and Israel has no alternative.

However, some credible Israeli analysts have expressed concerns that under the culture of opacity, hawkish Israeli leadership might be tempted to developed a different attitude regarding nuclear weapons, namely their use in situations less than

an existential threat to the state. Such leadership might see them for example as an "appropriate" Israeli response to an Iraqi chemical or biological attack. Such concerns led Israeli analyst Ze'ev Schiff to propose a law "The Red Button Law" that would place checks and balances on Israel's decision-making system in this most sensitive field. 18

From the Israeli perspective, the Hebrew State has been seeking nuclear capability not for the sake of hegemonic aspiration or national prestige but to develop an independent nuclear ultimate deterrent to balance the fundamental geopolitical asymmetries in conventional military power between Israel and the Arab states. Israel sees its nuclear capability as the ultimate insurance policy enabling Israel to inflict a holocaust on its enemies to prevent another holocaust on Israel. Although Israel acquired a nuclear option sometimes in the late 1960s, it has not declared, tested, or made any other visible use of this option, resulting in an "opaque" nuclear policy. Israel's strategic thinking has also led its government to contribute to a vigorous nuclear denial strategy based on enhanced political and intelligence coordination with other friendly states. To prevent Iraq from pursuing nuclear weapons programs, Israel bombed and destroyed the Iraqi Osiraq reactor in June 1981.

In 2 February 2000, for the first time in Israel's history, the Knesset held a discussion on Israel's nuclear program. Issam Mukhul, an Arab member of the communist Hadash Party, spurred debate on the controversial and previously off-limit subject. During the abbreviated debate, which lasted only less than hour Chaim Ramon, the government's minister for Jerusalem affairs, reiterated Israel's long-standing policy that it would not be the first nation to introduce nuclear weapons into the Middle East. ²²

Although Makbul's attempt to break the decades of silence sparked off a flurry of articles in the Israeli press, most of these were concerned with the safety procedures of the Dimona nuclear reactor and avoided the strategic or philosophical issue. Other articles emphasized the danger that any uncertainty over such sensitive issues in the highly volatile Middle East may result in dangerous escalations.

The most that the Israeli nuclear discourse allows is to refer to an Israeli "nuclear option" as a "capability" consisting of "unsafeguarded nuclear facilities". Israel made clear in the ACRS meetings that, as a matter of national strategy, it will continue to insist on linking progress on the peace front, as well as on linking the nuclear issue to visible progress in other areas of arms control, both conventional and unconventional. On the contrary, Israeli defense sources have publicly insisted that a leaner peacetime Israeli army must have an even stronger strategic deterrent component. It is the nuclear option in their view that will preserve peace.

Former Prime Minister Benyamin Netanyahu in 1996 clarified the Israeli position by noting that "lasting peace" could only mean peace among democracies: until the region becomes democratic, Israel is forced to maintain its strategic deterrence. Similarly, Prime Minister Ehud Barak, stated that Israel would need to maintain its nuclear option indefinitely. Such point of view only see peace based on the presence of Israeli nuclear weapons. It seems that Israeli public supports this view. Nearly all Israelis consider the nuclear option indispensable to their security, a view that will not completely recede once a comprehensive peace treaty is signed. This view does not see that peace would not change Israel's fundamental geopolitical predicament. Israel would still see itself as a small Jewish island surrounded by a vast Arab sea. This view means that a NWFZ is not feasible for the near future.

5. The Way Out

The situation in the Middle East requires a realistic perspective and new formulas to address its nuclear dimension. Problems in the Middle East include territorial disputes, the broader conventional balance, and proliferation of other non-nuclear WMD weapons. The peace process must be brought back on track on all fronts. Confidence and Security Building Measures (CSBMs) should be encouraged as part of a recommended step-by-step incremental approach in the Middle East. Track-two talks could be a practical step towards resuming bilateral and multilateral official talks. The chances for success of any resumed talks will be better if countries absent in the past were included (i.e., Iran, Iraq, Libya, and Syria).

To incorporate the nuclear issue within a regional architecture of peace and arms control, as well as within the wider context of global nuclear disarmament, the way out from the nuclear dilemma in the Middle East should go through linking arms control measures with a political time table for the overall settlement. Arms control talks in Europe would not have accomplished anything without prior agreements on the arms that talks intended to control. Consistent with these ideas, at certain phase of the process transparency is required by all states of the region concerning their conventional and unconventional arsenal.

The process of dealing with the nuclear issue can be looked at consisting of three phases:

Phase one: CSBMs + "No-First-Use"

• This phase will target building confidence and preventing deterioration of the region's proliferation conditions. In this phase, states of the region will commit themselves to the creation of WMDFZ as one of the fundamental outcomes of the process, by entering into serious talks as to how a WMDFZ be established and what

its components might be. The task will represent a new challenge to establish in the same zone inspection and verification regimes covering the three kinds of mass destruction weapons: nuclear, chemical and biological. In this regard, the talks will discuss the need to incorporate special and additional verification measures if it is to be politically, technically and publicly acceptable. In order to satisfy the concerns of some countries, special verification regime might be proposed to allow for mutual, reciprocal and intrusive inspections of both a routine and challenge nature.

- · Analyzing the conditions under which the states of the region would be prepared to give up their WMD options and the interim steps on the road to the creation of a WMDFZ.
- · Considering of initial steps to prevent the regional WMD situation from becoming worse. An example of such steps could be a "no first use" of WMD declaration by the countries of the region. To encourage countries of the region to give a pledge of "no first use" of WMD some additional measures could be suggested like a non-offensive redeployment of conventional forces near the border areas or by taking voluntarily unilateral initiatives in selected security areas.
- The interaction between missiles and some types of conventional weapons with WMD weapons could be discussed in this phase of the work.

Phase Two: Capping of WMD Stock

- This phase will prevent the regional WMD situation from becoming worse. In October 1990, a group of experts presented to the United Nation secretary-general a study on effective and verifiable measures, which would facilitate the establishment of a NWFZ in the Middle East. The study suggested practical measures to cap Israeli nuclear capabilities, such as putting the Dimona reactor under IAEA safeguards within the NPT system. This would keep the Israeli nuclear deterrent intact until further political steps be taken. What is interesting about this study is that it does not confine itself solely to the nuclear field, but instead seeks to limit other weapons of mass destruction and conventional weapons as well, including missiles. Absent in this study is a time frame during which Israel would be introduced to the Middle Eastern NWFZ.
- · Proposal to halt the production of fissile material for nuclear weapons. The Bush proposal for arms control in the Middle East in May 1991 contained an element prohibiting the production of fissile material as a necessary step towards the establishment of a Middle East NWFZ. The advantage of this proposal is that it can be future-oriented and it makes no specific reference to nuclear weapons only panning fissile materials for weapons. Applying this proposal will lead to capping Israel's unsafeguarded nuclear program and impose quantitative constrains on Israel's nuclear capabilities.

Phase Three: Establishing WMDFZ

- · It is a long-term phase targeting a Middle East free of all weapons of mass destruction. In this phase weapons of mass destruction will be phased-out over a period of time. Some could be eliminated as a result of international guarantees, while others should be traded according to peace treaties between Israel and Arab countries. The rest should be eliminated once full normalization of relations is achieved and different types of economic and functional cooperation are installed.²³
- This overall linkage between the political and economic aspects of ending the Israeli nuclear monopoly should be understood in the light of absolutely accepting putting constrains on the attempts of any country to acquire nuclear or other mass destruction capabilities. Egypt for example participated in the international coalition that finally destroyed Iraqi nuclear power, and has opposed Iranian attempts in this regard. In the meantime, Egypt has been very flexible in dealing with the issue of the Israeli nuclear capability by not using the "nuclear issue" to create tensions in the Egyptian-Israeli relations but rather raised it as a fundamental point of difference that should be tackled through negotiations. Egypt also sugested to having an agreement "in principle" on the creation of a nuclear free zone in the Middle East and accepted a postponement of the negotiations concerning Israeli nuclear capabilities until Israeli signs peace treaties with its neighbors.

Footnotes

- 1. The Military Balance: 2001-2002. *The 2001 Chart of Armed Conflict*, The International Institute for Strategic Studies, Oxford, University Press.
- 2. See: Israel's Nuclear Weapons at Federation of American Scientists http://www.fas.org/nuke/guide/israel/nuke/, 23 Oct. 2002, p.3 of 6.
- 3. See: Anthony H. Cordesman, "The Military Balance in the Middle East: an Executive Summary", IGCC Policy Paper # 49, March 1999, p. 88.
- 4. Abdel Monem Said Aly and Mohamed Kadry, "Naval Arms Control in the Southern Mediterranean: An Arab perspective", in *Europe and Naval Arms Control in the Gorbachev Era*, Sipri, Oxford University Press, 1992, p.304.
- 5. Khalifa, A. and Bakr, H., "Egypt and disarmament in the UN", *Al-Siyassa Al-Dawliya*, July 1978, p.17 (in Arabic).
- 6. Sadat had shown more understanding of the security problems and siege mentality of Israel. Moshe Dyan, minister of foreign affairs of Israel at the time of peace negotiations with Egypt has questioned himself in his book "Breakthrough: A personal account of the Egyptian Israeli Peace Negotiations": "What is the real reason that pushed Sadat to take his daring

step to go to Jerusalem ?..a question that I thought long to ask Sadat about, and I did not get the chance during his visit to Israel, because his time would not permit that. Afterwards, I did not stop to think about this subject during the various occasions that I had the opportunity to meet him in Camp David, in Egypt and in Israel..even when we were alone. Such occasion was materialized after one year and half in Ismailia, 4 of June 1979. Sadat's answer was: the principle cause behind my decision to visit Israel was that the Israeli have security problems, and they used to hide behind them and ask for face-to-face negotiations. Well, I decided to meet them directly and alone..me and Israel". [Queted from the Arabic version of Dyan's book, *Egyptian Information General Authority* translated books, book (764)].

- 7. Avner Cohen, "Regional Security and Arms Control in the Middle East: The Nuclear Dimension", in *Middle East Security Issues in the Shadow of Weapons of Mass Destruction Proliferation*, Barry R. Schneider, ed., USAF Counterproliferation Center, December 1999, p. 84.
- 8. UN General Assembly Records, A/C.1/PV.2001, p. 32-36.
- 9. See Abdel Monem Said Aly, "Quality vs. quantity: the Arab perspective of the arms race in the Middle East", ed. S.A. Stahl and G. Kemp, *the Arms Race in the Middle East and South Asia* (Carnegie Endowment for International Peace: Washington, DC, 1992), 61-74; and Talat Musalem, "Strategic causes for Israeli participation in Star Wars", *Drasat*, September 1987, p.3-11.
- 10. Nadia Mustafa, "Egyptian politics and the nuclear options: vision, behavior and constrains", *Al-Siassa Al-Dawlya*(July 19890, P.24-59.
- 11. See Cohen, Note (7), p. 88.
- 12. Ibrahim A. Karawan, "Nuclear Temptations: The Middle East as a Case Study" in *US Strategies for Regional Security*, The Stanley Foundation, 2001, p. 108.
- 13. See Carnegie Endowment for International Peace, Carnegeie Analysis, Chemical and Biological Weapons in the Middle East, at: http://www.ceip.org/files/nonprolif/templates/article.asp?NewsID=2669.
- 14. Lawrance Scheinman, "NBC and Missile Proliferation Issues in the Middle East" in Barry R. Schneider ed., "Middle East Security Issues: In the shadow of Weapons of Mass Destruction Proliferation", USAF Counterproliferation Center, (AU Press, Dec. 1999), p. 25.
- 15. Bill Sweetman, "Spy satellites: the next leap forward-Exploiting commercial satellites technology", *International Defense Review*, Vol. 30, January 1, 1997, p. 26.

- 16. See: John Steinbach, "Israel Weapons of Mass Destruction: a Threat to Peace", at Website of the nuclear Age Peace Foundation, at http://www.wagingpeace.org/articles/02.03/0331steinbachisraeli.htm, 5 from 9.
- 17. David Eshel, "Israel's nuclear deterrent faces first public scrutiny", *Jane's Intelligence Review*, Vol. 12, No. 7, July 2000, p. 14.
- 18. See Cohen, Note No. 7, p.92.
- 19. See Cohen, Note No. 7, p. 78.
- 20. Some reports speculate that a suspected nuclear explosion in the southern Indian Ocean in 1979 was a joint South African-Israeli test. See Note No. (2), p.5 from 6.
- 21. Ed Blanche, "Israel addresses the threats of the new millennium-Part One", *Jane's Intelligence Review*, Vol. 11, No.2, February 1999, p. 24.
- 22. See Arms Control Association at: http://www.armscontrol.org/act/2000_03/brmr00.asp.
- 23. Abdel Monem Said, "In the Shadow of the Israeli Nuclear Bombs: Egyptian ThreatPerceptions", *The Brown Journal of World Affairs*, Summer/Fall 1996, Vol. III, Issue 2, p. 160.