THE PROJECT ON MANAGING THE ATOM

A WMD-FREE ZONE IN THE MIDDLE EAST CREATING THE CONDITIONS FOR SUSTAINED PROGRESS

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HARVARD Kennedy School BELFER CENTER for Science and International Affairs

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A PROJECT ON MANAGING THE ATOM DISCUSSION PAPER

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ABSTRACT

How can the states of the Middle East begin to create the political conditions under which they can achieve serious and sustained progress toward controlling and eliminating nuclear, biological, and chemical weapons? We examine the challenges and obstacles that the parties of the region will need to overcome to bring a WMD-free zone into force. The challenges include: the widespread perception that weapons of mass destruction are useful tools of statecraft, the acute lack of trust between states of the region, uncertainty over internal transitions in the Middle East, a thicket of linkages between the issues that need to be resolved, the absence of regional institutions to facilitate negotiations, and differences over the scope and verification of a ban on weapons of mass destruction. For guidance on overcoming these obstacles we draw lessons from recent history in the Middle East, from the experience of other regions in establishing nuclear weapon free zones (NWFZs), and from scholarship on the causes of cooperation in international relations. We find that in analogous cases, effective confidence building toward cooperative security depended on symmetry of capabilities and shared goals. Regional institutions have played a crucial supporting role, and internal change has facilitated disarmament processes. In the Middle East, we note that the demand for WMD in the region has waxed and waned over time, and though rarely acknowledged, the region has made significant progress over several decades in creating more favourable conditions for cooperative security. The outcome of the Iranian nuclear stalemate, Israel's strategic choices, and civil war in Syria, will largely determine whether progress toward a WMD-free zone will occur.

We recommend a set of near-term measures that will help to clear the path toward productive negotiations. We propose broadly-focused confidence-building measures, including unilateral and sub-regional steps as well as agreement on general principles to guide negotiations. We suggest that the process of addressing WMD and other Middle East regional security issues will require a regional foundation. To address the absence of suitable institutional machinery in the Middle East, we recommend the establishment of a regional security forum as an institutional home for the ongoing discussion of WMD issues and other matters of mutual concern.

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AN OPPORTUNITY POSTPONED

In May 2010, the members of the Nuclear Nonproliferation Treaty (NPT) called for convening "a conference in 2012, to be attended by all States of the Middle East, on the establishment of a Middle East zone free of nuclear weapons and all other weapons of mass destruction" (United Nations 2010). The proposal to create a WMD-free zone in the Middle East has a long history, and was a key provision enabling the indefinite extension of the NPT itself in 1995. After years of inaction, the proposed 2012 conference represented a rare opportunity to begin a process for improving the regional security environment in the Middle East through arms control and disarmament. In the months that followed the 2010 NPT review conference, the U.N. Secretary General together with the NPT depository states—the United States, the United Kingdom, and Russia—appointed Finnish diplomat Jaakko Laajava to serve as a facilitator for an initial conference, and Finland was selected to host the meeting. Ambassador Laajava began a long series of consultations to arrange a meeting in Helsinki, which was to take place in December 2012.

In November of 2012, preparations for the proposed conference were called off. The co-sponsors offered various explanations for the apparent failure. Russia stated that "not all countries in the Middle East have agreed to participate in the Conference" (Russian Federation 2012). The British statement suggested that "more preparation and direct engagement between states of the region will be necessary to secure arrangements that are satisfactory to all" (United Kingdom 2012). The United State explained that the cancellation of the 2012 date was due to "present conditions in the Middle East and the fact that states in the region have not reached agreement on acceptable conditions for a conference" (Nuland 2012). The U.S. spokesperson also suggested that more attention be focused on the obstacles. Ambassador Laajava, on behalf of Finland, pledged to continue efforts "to prepare the ground together with the conveners and the States of the region for the earliest possible convening of a successful conference, to be attended by all states of the region" (Finland 2012).

Between the lines of these delicately worded statements were several clear messages. First, as press reports noted, Israel was a holdout; Jerusalem was not willing to participate in a conference at which it would be the primary target of diplomatic harassment over its nuclear weapons. Second, other states in the region, particularly leading Arab states, were unwilling to accommodate Israel's wishes that the process be convened under a regional umbrella, independent of the NPT, and cover a broad agenda of regional security issues. The facilitator was apparently unable to bridge the differences between Israel and the Arab group. Third, as the process broke down, the co-sponsors could not agree on the best course of action. Their separate statements were evidence of the lack of consensus among the conference organizers. But, fourth, no party was willing to rule out completely the possibility that a potentially valuable process might still be initiated. No party has yet to walk away.

In fact, the political, security, and economic benefits of establishing a WMD-free zone in the Middle East are potentially great and would be broadly shared. Many of the region's most vexing problems—from the Iranian nuclear standoff, to threat of Syrian chemical weapons, to the proliferation of ballistic missiles, to the sense of fear and injustice surrounding Israel's nuclear program, to concern over the spread of nuclear energy—would be eased or erased with the entry into force of a region-wide treaty banning all weapons of mass destruction and their delivery vehicles (Fitzpatrick 2012). Beyond the region, tangible progress toward a WMD-free zone in the Middle East would strengthen the nonproliferation regime and ease dissension in the review conference process.

Conversely, failure to seize the opportunity to initiate WMD-focused discussions will deal a blow not only to the prospect of improving regional security in the Middle East but also to the nonproliferation regime itself. If the effort to begin discussions on a WMD-free zone in the Middle East collapses, certain states in the region will question the value of the NPT itself and may eventually reconsider whether they wish to continue to be bound by the treaty. A failure to launch arms control and disarmament discussions in the Middle East will constitute a failure to implement a decision of the 2010 NPT review conference and is nearly certain to deepen tensions between the nuclear weapon states at the 2015 review conference. Within the Middle East, absent a process for addressing WMD and other regional security issues, proliferation pressures will grow.

If the stakes are formidable, so are the challenges. Even had it not been postponed, an initial conference is a small step in a long and difficult process. The obstacles to establishing a WMD-free zone in the Middle East are numerous and long-standing. They will not soon be overcome. This paper is focused on those obstacles and how states might get beyond them. The question at hand is how the states of the region can begin to create the political conditions under which they can achieve serious and sustained progress toward the establishment of a WMD-free zone.

To tackle that question, we first examine the obstacles that the parties of the region will need to overcome to bring a WMD-free zone into force. The obstacles include the widespread perception that weapons of mass destruction are useful tools of statecraft, the acute lack of trust between states of the region, uncertainty over internal transitions in the Middle East, a thicket of linkages between the issues that need to be resolved, the absence of regional institutions to facilitate negotiations, and differences over the scope and verification of a ban on weapons of mass destruction. Second, for guidance on overcoming these obstacles we draw lessons from recent history in the Middle East, from the experience of other regions in establishing nuclear weapon free zones (NWFZs), and from other scholarship on the causes of cooperation in international relations and on nonproliferation. Specifically, we examine how others have overcome deficits of trust, what kinds of processes are most conducive for building confidence, and what kinds of incentives might help to bridge differences among the

parties. Third, we briefly examine the current regional context for WMD discussion and suggest that the outcome of the nuclear standoff with Iran, Israel's strategic decisions, and the fate of the Syria civil war will largely determine the prospects for near-term progress. Fourth, we conclude by recommending steps that will help create conditions conducive to region-wide security discussions focused on eliminating weapons of mass destruction.

Our recommendations focus on near-term measures that will help to clear the path toward productive negotiations rather than on the particular bargains states in the region should consider once those negotiations begin. To help foster the conditions for sustained progress we propose a set of broadly-focused confidence-building measures, including unilateral and sub-regional steps as well as agreement on general principles to guide negotiations. We suggest that the process of addressing WMD and other Middle East regional security issues will require a regional foundation. To address the absence of suitable institutional machinery in the Middle East, we recommend the establishment of a regional security forum as an institutional home for the ongoing discussion of WMD issues and other matters of mutual concern. Beyond the near term, we suggest adopting an incremental approach to arms control and disarmament measures in the Middle East.

OBSTACLES TO A MIDDLE EAST WMD-FREE ZONE

The obstacles to establishing a WMD-free zone in the Middle East are formidable. The problems include the widespread belief in the Middle East in the utility of weapons of mass destruction, the acute lack of trust between states in the region borne of decades of war and conflict, and uncertainty about the future caused by internal political changes sweeping through the region.¹ Leaders must overcome the complicated linkages between the issues that need to be resolved, and the absence of regional institutions to facilitate and support negotiation and confidence-building. Finally, the parties must overcome substantive differences over scope of the prohibitions in question and over the means of verification. In light of these challenges, it is not surprising that progress has been frustratingly slow, and policymakers' reactions to efforts to establish a WMD-free zone in the Middle East can range from avoidance to scorn.

THE PERCEIVED UTILITY OF WMD AND THEIR DELIVERY SYSTEMS

To state the obvious, if the states of the Middle East neither possessed nor desired nuclear, chemical, and biological weapons, agreeing on the establishment of a WMD-free zone would be a relatively trivial matter. Unfortunately, many responsible officials in key states across the region believe these weapons are either necessary or highly desirable. The persistence of this belief and the material

¹ Asymmetric capabilities, a multipolar distribution of power, and geographic and technological features underlying the severe security dilemmas in the region might be considered "structural" obstacles to a WMD-free zone. We choose to focus on leaders' perceptions of these conditions and their beliefs about their significance.

conditions that underlie it are major obstacles to the establishment of a WMD-free zone. The evidence of this belief is found in clear patterns of the pursuit, acquisition, and continued possession of a variety of weapons of concern.² Governments have acquired or attempted to acquire nuclear, chemical, and biological weapons either to deter attack from neighbors with such weapons or to insure regime survival under conditions of extreme pressure. As long as leaders attach a high value to these weapons, they will refuse to give them up without very reliable assurances that national and regime security would be maintained or strengthened. The asymmetry of capabilities makes the persistent perception of the utility of WMD particularly difficult to address.

Israel

For Israel, nuclear weapons are believed to represent the ultimate guarantor of national survival in a region of hostile neighbors, some of whom do not recognize its right to exist. Israel faces adversaries with advantages in population, territorial depth, natural resources, and wealth. Its sense of vulnerability is magnified by the tragic experience of the Holocaust and the deep scepticism about foreign powers' commitments to protect the Jewish people. As a small country, with a small population concentrated in a few cities, Israel insists on possessing options for its defense that are independent of outside aid. In this context, Israel's nuclear weapons are thought to provide a long-term insurance policy against existential threats and to deter a massive conventional attack or one involving nuclear, chemical, or biological weapons. An additional rationale is to convince adversaries that, since they cannot defeat Israel militarily, they may as well accommodate it politically (Feldman 1996, pp. 95-120; Cohen 2010, pp.77-78; Baumgart and Müller 2004-05). As a corollary, Jerusalem has demonstrated its insistence on denying the nuclear option to its neighbors, even resorting to preventive force if needed, as it did in the 1981 bombing of the Iraqi Osiraq reactor and the 2007 attack on the Syria nuclear reactor site near Deir az-Zour.

Jerusalem has never declared that it possesses nuclear weapons, preferring a policy of nuclear "ambiguity" or "opacity."³ The size of Israel's arsenal is unknown; estimates range from 60 to some 400 nuclear weapons which can be delivered from land, air, and sea (IISS 2008, pp 132-33). Israel remains outside the NPT and is not bound by the obligations of the treaty. Israel is also believed to have engaged in research on and development of biological and chemical agents for weapons. The rationale for this work is similar to that underlying Israel's nuclear weapons program, as is the secrecy surrounding it (Cohen 2001). The details on these activities, for example, whether or not Israel has ever tested or stockpiled such weapons, are not available. Israel signed the Chemical Weapons Convention

² For an overview of WMD proliferation in the Middle East, see IISS (2008) and Bahgat (2007).

³ Avner Cohen defines "opacity" as a "situation in which the existence of a state's nuclear weapons has not been acknowledged by the state's leaders, but in which the evidence for the weapons' existence is strong enough to influence other nations' perceptions and actions" (1999, ix).

(CWC) in 1993 but has called for broader regional acceptance before it will ratify it. It has not signed the biological weapons convention. Israel's missile capabilities are extensive, providing capability to deliver both conventional and unconventional payloads to anywhere in the region and beyond (Kubbig and Fikenscher 2012, pp. 312-15; NTI 2011).

Iran

Tehran continues to declare that its nuclear program is exclusively for peaceful purposes. Indeed, Iranian leaders have repeatedly and explicitly outlined the reasons why nuclear weapons are morally and strategically undesirable (Islamic Republic of Iran 2010). Nevertheless, Iran's neighbors are deeply suspicious of Tehran's nuclear intentions as a result of its inadequately explained past nuclear activities (including a number of activities documented by the IAEA that are consistent with development of a nuclear weapon for delivery by a missile), current broad-scope nuclear operations, and security environment (Dassa Kaye and Wehrey 2007). Iran's security context is well-understood if not always acknowledged. Nuclear-armed states surround Iran to the north, east, and west. The United States has invaded and occupied countries on Iran's eastern and western borders, and U.S. officials openly call for regime change in Tehran. Iran is isolated regionally and sanctioned internationally. Tehran's enemies have sabotaged its nuclear program and assassinated its scientists. And the trauma of Iran's eight-year war with Iraq, in which Iran was victim to Iraq's use of chemical weapons at the time when Baghdad was also pursuing nuclear weapons, shapes the worldview of Iran's top leadership.⁴

Since 2003, Tehran has been unwilling or unable to satisfactorily explain to the IAEA several activities that appear to be inconsistent with the peaceful uses of nuclear technology (IAEA 2011a). Iran has continued nuclear operations in defiance of U.N. Security Council resolutions, expanded the scale of its enrichment program, and endured successive rounds of international sanctions as a result. Iran's willingness to incur such high costs in order to push forward the development of a full array of nuclear fuel-cycle facilities suggests that at a minimum Iranian leaders wish to "hedge their bets," i.e., achieve a capability that would enable the acquisition of nuclear weapons relatively quickly if needed.⁵

Iran possesses the largest number of deployed ballistic missiles in the Middle East (NTI 2011). Relying heavily on North Korean assistance, Tehran developed various medium-range liquid-propelled missile systems in its "Shahab" series. The Shahab-3, with its range of some 1,000 km., could theoretically strike Israel, U.S. bases in the Middle East and some parts of southern Europe. In addition, Tehran is developing a new medium-range solid-propellant missile with a range of approximately 2,000 km. (the

⁴ For analyses of Iran's security perceptions see Zarif (2007), and Mousavian (2012, pp. 3-4).

⁵ For a discussion of hedging, see Levite (2002/03), who defines hedging as "a national strategy of maintaining, or at least appearing to maintain, a viable option for the relatively rapid acquisition of nuclear weapons, based on an indigenous technical capacity to produce them within a relatively short time frame ranging from several weeks to a few years." (p. 69).

Sejil), and has launched small communications satellites using two-stage solid propelled rockets, demonstrating the country's strong will to invest in longer range, multiple stage, solid-fuelled missiles.⁶ Iran is a member of both the BTWC and the CWC. Western intelligence agencies have in the past suggested that Iran developed chemical and biological weapons capabilities during its war with Iraq (when it was a victim of chemical attack), and possibly maintained a chemical weapons stockpile, but such allegations have not been raised in recent years. When Iran joined the CWC, Tehran acknowledged the existence of a chemical weapons program developed during the last years of the 1980-1988 war with Iraq. Western intelligence agencies have in the past suggested that Iran maintained an active program for the development and production of chemical weapons. Such allegations, however, were never proved and have not been raised in recent years.

Arab States

Numerous Arab states have demonstrated an interest in acquiring nuclear weapons to enhance prestige, bolster regime security, and deter Israel or other adversaries. With the possible exception of Syria, all known programs have been terminated. Iraq engaged in a massive effort to acquire nuclear weapons over some two decades. Were it not for its massive mismanagement and strategic blunders Iraq might today be a nuclear-armed state.⁷ Libya's unsuccessful attempts to acquire nuclear capabilities are also well documented (Jentleson 2005-6; Bowen 2006; Braut-Hegghammer 2008). Egypt under Nasser explored the possibility of acquiring nuclear weapons, although it never seriously committed itself to the endeavour (Walsh 2010; Rublee 2006). Saudi Arabia is reported to have discussed the purchase of weapons from Pakistan (IISS 2008, p. 42). More recently, Prince Turki al-Faisal remarked that if all efforts "fail to convince Israel to shed its weapons of mass destruction and to prevent Iran from obtaining similar weapons, [then] we must, as a duty to our country and people, look into all options we are given, including obtaining these weapons ourselves" (Cecire 2011).

At present, the IAEA is attempting to investigate, without cooperation from Damascus, Syria's suspected illicit nuclear activities in connection with the unresolved issues related to the facility at Deir az-Zour. The facility, which Israel is believed to have bombed on September 6, 2007, is widely believed to have been a plutonium production reactor under construction with North Korean assistance. Though the IAEA was permitted a single visit to the site of the bombing after it had been cleared, Damascus has repeatedly denied IAEA requests to return to the site, inspect other facilities, or resolve outstanding questions in the intervening years (Crail 2011).

Other unconventional weapons systems covered by the proposed WMD-free zone are also present in the Arab world. Syria is believed to have an active program for producing and stockpiling mustard and

⁶ For a review of the Iranian missile program, see IISS (2010).

⁷ Iraq's nuclear activities are described in Braut-Heggahmmer (2011) and Iraq Survey Group (2004).

sarin gas and the biggest stocks of chemical weapons in the entire region (Blair 2012). Syrian officials recently confirmed Syria's possession of chemical weapons. Egypt, Israel, and Iran have the capability to produce chemical weapons (Egypt and Iraq have used them in the past). There are conflicting reports about biological weapons programs in Syria (NTI, 2012). This bleak picture of the region becomes even worse if one considers that many countries in the Arab world are engaged in advanced ballistic and cruise missile programs to produce systems capable of delivering WMD payloads to the territories of their neighbors with little or no warning.⁸ (See Table 1 for a summary of major states treaty commitments, capabilities, and stockpiles).

In sum, there is ample evidence that these weapon and delivery systems play an important role in the national security strategies of several states in the region. As long as the perception persists that nuclear, biological, or chemical weapons hold special value, states will resist entering discussions that could plausibly lead to their prohibition. Abandonment of these weapons will require a fundamental transformation in both security concepts and threat perceptions.

REGIONAL CONFLICT AND THE DEFICIT OF TRUST

Underlying the perceived need for nuclear, biological, and chemical weapons is a deep and pervasive mistrust among leaders in the region about the intentions of their neighbors. Ongoing conflict is at the root of this mistrust. Israel's occupation of Palestinian and other Arab territories, Iranian-Arab tensions, and Israeli-Iranian tensions all create an atmosphere of suspicion that has until now and with very few exceptions made productive arms control and disarmament negotiations impossible to convene.

The Middle East is a highly troubled, militarized region that has experienced intense inter- and intrastate violence, territorial disputes, meddling and intervention by external powers, struggles for regional hegemony, revolution, ethnic and sectarian rivalries, and general political instability resulting from precarious domestic legitimacy.

Weapons of mass destruction have featured prominently in this troubled history. The Middle East is the only area in the world where weapons of mass destruction have been employed in combat since Hiroshima and Nagasaki in WWII—chemical weapons were used by Egypt against Yemeni royal forces in the mid-1960s, by Libya against Chad in 1987, and by Iraq against its own Kurdish population and against Iran in the 1980s (Bahgat 2007, p. 1). Nearly every major post-World War II military attack on suspected WMD facilities has taken place in the Middle East, including an Iranian strike against nuclear facilities in Iraq in 1981, Israel against Iraq in 1981, several Iraqi attacks against Iran in 1984 to 1987, United States and allied forces against Iraq in 1991, 1993, 1998, and 2003, and

⁸ For a recent overview of missile programs across the region see Gormley, Clarke, and Altmann (2012). For perspectives on how to control missile proliferation in the Middle East, see Kubbig and Fikenscher (2012).

Israel against Syria in 2007 (Malin 2012a; Kreps and Fuhrmann 2011; Reiter 2006). The United States invasion of Iraq in 2003 was the first "counter-proliferation war," waged (unnecessarily, it turned out) to remove weapons of mass destruction from Iraq. Over 5,000 ballistic and cruise missiles have been fired in combat since the end of WWII; more than 90 percent were launched in the Middle East (Gormley 2008, 48).

Table 1	I. Selected	Middle	East WMD	capabilities
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Country	Nuclear Weapons	Chemical Weapons	Biological Weapons	Ballistic Missiles
Algeria	No	No	No	No
Egypt	No	Has used in past. Suspected of maintaining a chemical warfare capability. No information on current stockpiles.	Very limited open-source information. Probably no active program, although it has strong technical base.	Moderately advanced missile program (indigenously developed capability for Scud- B and enhanced Scud-C production).
Iran	Advanced fuel cycle capabilities, ostensibly for peaceful purposes. Widespread concerns on possible military dimensions of the program.	Capability, but no stockpiles.	No	Committed to one of the most sophisticated missile programs in the Middle East, with both liquid and solid fueled systems. Shahab missile series 1,2 and 3. Launched space vehicle in 2011.
Iraq	Extensive past activity; no known current program.	Extensive past activity; no known current program.	Extensive past activity; no known current program.	Extensive past activity; no known current program.
lsrael	Believed to possess an arsenal of 60-400 weapons (IISS 2008)	Capability, no stockpiles.	Conflicting reports.	Region's most advanced missile program. Advanced ballistic (Jericho II and III) and cruise missiles, and missile defense systems. National space program
Libya	No	Renounced in 2003; previously unknown stocks declared in 2011- 12. Disposal underway and with expected completion in 2016. (Schneidmiller 2012)	No	Very limited and outdated missile arsenal from the 1970s.
Saudi Arabia	No	No	No	36 CSS-2 intermediate-range ballistic missiles purchased from China.
Syria	No, although suspected interest in acquiring capabilities. According to IAEA, the building bombed by Israel in 2007 was a nuclear reactor.	Suspected of having the most advanced CW capabilities in the region. Active production of mustard, sarin, possibly VX.	Conflicting reports.	Possesses one of the largest arsenals of ballistic missile in the Middle East, including three domestically assembled Scud missile variants, and a solid-propelled missile.

SOURCE: NTI's online country profiles, http://www.nti.org/country-profiles/ unless otherwise noted.

Past conflict need not impede cooperation. Indeed, by definition, agreements are negotiated between parties with opposing interests; conflict can help to clarify the balance of capabilities and interests and can enable the parties to assess the likely costs of no agreement, potentially helping to drive them toward accommodation. In the Middle East, however, the trauma and persistence of conflict feeds mistrust and blocks progress toward creating a WMD-free zone in several ways. First, as noted above, nuclear, chemical, and biological weapons are seen as potentially useful for deterring or prevailing in future rounds of conflict; since adversaries are frequently perceived as implacably hostile and untrustworthy in the Middle East, negotiations to prohibit the possession of such weapons are seen by many officials as counterproductive. Second, as long as mistrust persists and Arab-Israeli and other disputes dominate the security agendas in many key states in the region, regional arms control, even if viewed as useful for managing conflict, is a lesser priority. Third, the legacy of regional conflict causes parties to mistrust even modest proposals that adversaries or former adversaries put forward. For example, Israeli officials commonly allege that Egypt's energetic efforts to advance proposals for a regional WMD-free zone are not serious overtures, but rather are messages for domestic and regional audiences. Similarly, Egyptian officials have in the past dismissed Israeli proposals for confidence building measures charging that incrementalism is merely an excuse for delay—just as it was in Israeli-Palestinian negotiations over territorial withdrawal. Finally, it is the basic absence of trust that has paralyzed efforts to sequence arms control and more fundamental political questions (such as resolving past conflicts and establishing diplomatic relations) in a negotiating process. Conflicting priorities cause all issues to be deferred out of fear that progress on only one issue will be exploited by one side at the expense of others.

UNCERTAINTY OVER INTERNAL TRANSITIONS

The revolutionary transitions sweeping through the Middle East have substantially increased the uncertainty surrounding the prospects for near-term negotiation on WMD issues, and could continue to affect negatively the schedule and agenda of the postponed conference in Helsinki. The internal revolts have not only potentially created a popular base for the pursuit of WMD, but also have lowered the priority of work on a regional WMD-free zone, and called into question the participation of several key states in arms control and cooperative security discussions.

The risk that the Arab revolutions might radicalize the Arab opinion should not be underestimated. One can easily imagine a scenario in which the more radical elements of the newly elected Islamist governments in Cairo, Tunis and elsewhere in the Middle East inform the public discourse towards more hard-line positions on WMD issues. In contrast to the past, newly elected leaders and parliaments will need to be highly sensitive to the will and the moods of voters. Rising nationalist and populist sentiments in the Muslim civil society could hamper progress towards political dialogue and arms control. A recent poll conducted in Egypt showed a growing popular interest in the acquisition of nuclear weapons (Rogin 2012); the peace treaty between Israel and Egypt is likewise unpopular. It is also feared that anti-Israeli sentiments might grow stronger over time. As noted by Michael Elleman, "The proverbial Arab street, empowered by the recent political developments in the region, will find it

difficult to accept compromises that address Israel's security concerns without a resolution of the Palestinian issue and Israel's nuclear monopoly" (Ellerman 2012).

Although the current leadership in Iran weathered the reformist challenge posed in 2009 and the reverberations that followed, the government will be reluctant to expose itself to internal criticism that would likely arise at the spectacle of Iranian representatives sitting side by side with Israeli representatives to talk about common security concerns. Conflict in Syria in particular complicates the question of who will represent that country at the proposed first conference. The Assad government will be hestiant to sit at the table with Arab League states that are calling for Assad to step down. If Syria were to agree to participate, Arab states would be reluctant to cooperate on a joint Arab position with a state whose very membership in the Arab League has been suspended.

For those states whose participation is not really in doubt, the formulation of positions may be in flux. It was Mubarak's Egypt that championed the proposal for a WMD-free zone in the lead up to the 2010 NPT review conference. Egypt's basic position on the question of a zone has not changed following the ouster of Mubarak, and the challenge posed by Israel's nuclear weapons persists regardless of the constitutional and leadership changes in Egypt; but it is an open question whether Egypt will continue to press, as part of its national security strategy, for a WMD-free zone as it did in the past or whether it will change its strategy.

Finally, Israel, which was exceedingly reluctant to proceed with discussions of a zone before the Arab revolutions and civil war in Syria began, now argues that the concept of a WMD-free zone is "less applicable to the current volatile and hostile Middle East region [and] any attempt to reach this goal requires a significant transformation of the regional trend" (Chorev 2012). Similarly, the United States has suggested that "the timing and pace of these fundamental political shifts will be a factor in determining how to move forward on the Helsinki Conference in a manner that is most conducive to a constructive dialogue and positive outcome" (Countryman 2012).

ISSUE LINKAGES

The difficult issues in need of resolution before a WMD-free zone can be brought into force are inextricably tied to one another. The 1995 NPT Review and Extension Conference recognized this linkage in its Middle East resolution when the body declared that it "endorses the aims and objectives of the Middle East peace process and recognizes that efforts in this regard, as well as other efforts, contribute to, inter alia, a Middle East zone free of nuclear weapons as well as other weapons of mass destruction" (United Nations 1995). This connection and others, though inescapable, prevents progress toward creating a zone because the parties hold opposing views on how to structure and sequence negotiations on the component parts of the problem.

Three sets of issues in particular are intertwined. First is linkage between various weapons systems. One purpose of Israel's nuclear arsenal is to deter a chemical or biological attack. A common Israeli view is that negotiations to bring the CWC and BTWC into force should precede discussion of nuclear issues (Levite 2010, p. 162). However, as Nabil Fahmy has written, "Egypt and some other Arab countries are determined not to ratify any WMD conventions before Israel ratifies the NPT" (Fahmy 2011, p. 15). The Arms Control and Regional Security talks of the early 1990s collapsed over precisely this issue.

Second is the linkage between arms control and disarmament steps and broader regional security issues, including on Arab-Israeli and Palestinian-Israeli disputes, and Iranian-Arab disputes (e.g., over the three islands and over the future of Iraq and Syria). Israel has long maintained that it will discuss entering into a WMD-free zone only after a regional peace agreement is reached. As Ariel Levite has explained, "while seeing disarmament (including nuclear disarmament) as a desirable outcome, Israel nevertheless believes that it could and should not be pursued independently. Progress toward nuclear disarmament is clearly seen not only as secondary to attaining other more pressing goals of comprehensive peace and normalization, but is in fact explicitly defined as something that is a by-product of attaining these goals" (Levite 2010, p. 160). Indeed, as discussed above, Israel's nuclear weapons are intended to ensure its survival in the absence of regional peace and normalization.

Not surprisingly, Arabs and Iranians do not consider the Israeli nuclear arsenal and missile capabilities as defensive but rather as instruments to back an offensive and assertive foreign policy which includes a refusal to withdraw from territories captured in conflicts with Lebanon and Syria, as well as from the Palestinian territories of the West Bank and Gaza. Hence, Arabs and Iranians argue that Israeli nuclear disarmament must precede peace and normalization, As the Iranian former diplomat Hossein Mousavian writes, "the process of establishing a WMDFZ in the Middle East can potentially facilitate a security arrangement and help find a just peace to the Arab-Israeli conflict in the Middle East" (Mousavian 2010, p. 144). Arab and Iranian officials frequently suggest that Israeli nuclear weapons are, if not the *only* obstacle to the establishment of a nuclear weapons free zone, "the main obstacle" to such an outcome (IAEA 2010).⁹

The third problematic linkage is between progress on solving nonproliferation issues (particularly the cases of Iran and Syria) and progress on disarmament. Israel identifies Iran and Syria as primary threats and asserts that the push toward regional arms control and disarmament is misplaced; the priority should instead be to get Iran and Syria to comply with their nonproliferation obligations (Chorev 2012).

⁹ For additional examples, see the Arab and Iranian statements on Israeli nuclear capabilities from the 2010 IAEA General Conference meeting. For Iran, for example, Israel's disarmament "would, undoubtedly, lead to the early realization of a nuclear weapons free zone in the Middle East" (IAEA 2010).

Some of the Arab states and Iran see Israel's position as hypocritical. They charge that Israel's nuclear weapons are a greater threat than Iran's nuclear potential, and that the initiation of regional arms control discussions—first and foremost on the Israeli nuclear issue—cannot await a resolution of unresolved issues in the Iranian and Syrian files with the IAEA and Security Council.¹⁰ All three of these linkages have made the formulation of an agenda for discussions of arms prohibitions in the Middle East essentially impossible to date.

ABSENCE OF SUPPORTING INSTITUTIONS

The Middle East is institutionally impoverished. As a result, there is no extant regional host, source of authority, or mechanism for convening WMD-free zone discussions. There are very few intergovernmental organizations of any kind in the region and none that include the Arab states, Israel, and Iran. Those institutions that do exist—the Arab League, the Gulf Cooperation Council, the Arab Maghreb Union, and the Organization of the Islamic Conference—are generally weak and historically ineffectual. In particular, although the Arab League, established in 1945, is one of the world's longest-surviving regional organizations and includes all Arab states, in matters of major importance, it has proven historically to be internally divided and essentially ineffective. This deficiency is especially evident in the security field, where it plays a limited collective security or conflict-mediating role (Al-Marashi 2008; Romano and Brown 2008).¹¹

Paul Aarts has described the Middle East as "a region without regionalism" (1999, p. 911). Institutions are scarce even in economic and social realms; the Middle East is "not only the least integrated into the world economy, but is also characterised by the lowest degree of regional economic cooperation" (Carkoglu et al. 1998, p. 31). According to Louise Fawcett, states in the region pursue their economic and military interests "in either ad hoc or bilateral alignments: through oil sales to the developed world, or through the receipt of military assistance and material from one of the superpowers." Cooperative Arab efforts have not been able to "supply the framework to overcome the security dilemma that different regimes faced" (2009, p. 198). Middle Eastern initiatives of regional integration, some of which had some degree of success, nevertheless failed to produce any long-term outcomes for sustained cooperation and deeper integration (Coskun 2006, p. 7).

The explanations for the low degree of cooperation in the Middle East are numerous and overlap to a great extent with the obstacles to achieving a WMD-free zone. The reasons for the absence of regional institutions include: states' aversion to the infringements on sovereignty (Heller 2004, p. 129), the long

¹⁰ Interview with an Egyptian diplomat Cairo, Egypt, October 20, 2010. A common position voiced within the Arab League is all military nuclear programs should be prohibited, and that such a prohibition should apply equally to Israel and Iran.

¹¹ Recently, however, the Arab League took the unprecedented steps of calling on the UN Security Council to intervene in Libya and suspending Syria's membership in the body, suggesting that its hapless and divided past may not serve as prologue to its future.

history of deeply rooted inter-state conflict, the polarizing effects of interventionist extra-regional great powers, persistent and severe intra-regional security dilemmas, the dominance of national and regime interests over collective regional interests, and the prevalence of rentier economies and their demobilizing social pacts (Legrenzi and Harders 2008, p. 2). Normative factors are also important. In the absence of a sense of community and common identity, the incentives to act in concert are insufficient to offset narrowly conceived national interests, concerns, and suspicions. Middle Eastern states may agree "on certain principles and norms that should govern behavior but [they] cannot trust others to keep or enforce them; hence the rate of defection is high and the (relative) security of bilateralism often preferred" (Fawcett 2009, p. 192).



Table 2: Status of WMD agreements in the Middle East today

States of the region are members of several global treaties and conventions regulating WMD-related activity (see Table 2). But none of these agreements include all states in the region, each regulates only a narrow slice of behaviors that would be covered in a WMD-free zone, and international verification

and monitoring procedures, if they exist, are considered inadequate by some governments. Even if all states joined and ratified all relevant global treaties and conventions, there would still be a need for a new, regionally-based organization, at a minimum, to facilitate discussion of issues that arise in connection with the fulfillment of obligations in a WMD-free zone.

The absence of any forum for discussion creates a significant procedural hurdle to initiating arms control and disarmament negotiations. The experience of the past two years illustrates the point. The 2010 NPT review conference's call for concrete steps toward a WMD-free zone in itself involved an excruciating negotiation (Johnson 2010). That negotiation resulted in the convoluted proposal calling on the U.N. Secretary General, together with three sponsoring states of the 1995 Middle East resolution (the United States, Great Britain, and Russia), in consultation with the states of the region, to appoint a facilitator and identify a host government for convening a conference on the establishment of a WMDfree zone. Following the 2010 NPT review conference, the Arab League states recommended that the facilitator not be from a nuclear weapon state and that the host government be outside of the region. Meanwhile, Israel continued to insist that as a non-member of the NPT, it did not recognize the authority of the review conference in its call for the creation of a WMD-free zone. The process of appointing a facilitator took over a year. Although a site (Helsinki) and tentative dates (mid-December 2012) were announced in the press, the participation, agenda, modalities, protocols, levels of representation, etc., have not been settled and the 2012 date was ultimately postponed. As long as there is no recognized, permanent forum in the region for the ongoing discussion of the vast array of issues in need of resolution to establish a WMD-free zone, each step toward that goal will require an inordinate amount of international wrangling to get the parties to the table.

DIFFERENCES ON SCOPE AND VERIFICATION

Even if the current WMD capabilities, conflict and mistrust, internal turmoil, and issue linkages were not major concerns, the parties hold opposing views on fundamental elements of what they want to achieve. There is no consensus on the appropriate scope of the prohibitions or on the desired verification mechanisms; if discussions do get underway, the gap between the parties opening positions will in some cases be wide, even setting aside the above problems.¹²

What is to be prohibited—what constitutes a weapon of mass destruction—in the yet-to-be-defined zone is also uncertain, though here the lines have not been drawn starkly (Prawitz and Leonard 1999). What constitutes a delivery system will be a difficult issue to resolve, particularly given the asymmetries in capability and geography, the emergence of new weapons such as unmanned aerial vehicles, the proliferation of cruise missile technology, and the progressive development of missile

¹² Leonard and Prawitz's (1999) treatment of these issues is still depressingly relevant. See also Kane (2011, pp. 57-58).

defenses.¹³ Concerning the thorny issue of verification, significant differences exist between the regional parties. In the past, Arab states have generally expressed more confidence in existing global treaties, though it is recognized that the region will need to find remedies to address the gap in verification of commitments on biological weapons and delivery systems (Crowley 2008, pp. 339-40). Israel has insisted that mutual verification, as part of a more comprehensive and intrusive regional verification regime, will be needed to supplement existing global treaties (Levite 2012, p. 5). Such verification issues are not obstacles to getting a negotiation started, but they will pose a major challenge to bringing a treaty into force.

OVERCOMING OBSTACLES: LESSONS FROM HISTORY AND THEORY

It is still unclear whether the states of the region will grasp the opportunity afforded by the current international focus on initiating a process to create a WMD-free zone in the Middle East. Given the nature of the obstacles described above, three questions are particularly salient. What would cause leaders to change their beliefs and overcome the aversions that are preventing progress toward a zone? How can the procedural issues be addressed? And how can the states of the region overcome their substantive differences on what an agreement must include? To address those questions, we examine how other regions confronted similar challenges, how the Middle East has grappled with these issues in the past, and how states more generally overcome obstacles to cooperation.

In what follows, we do not attempt to offer a road map to Middle East peace and disarmament. Instead, we offer a set of observations focused mostly on successful processes and outcomes that might be relevant to the Middle East WMD-free zone proposal. We recognize that our observations are based on a selective reading of theory and history. Each zone around the world is unique and originates from different and specific conditions. There is no "one size fits all" package of attributes for the Middle East, and generalizing from historical analogy and abstract theory must be approached with care.

GENERAL OBSERVATIONS

We begin with several observations about the Middle East region and potential for progress on cooperative security and WMD-disarmament.

¹³ For an extended examination of now delivery vehicles could be dealt with in a WMD-free zone, see Kubbig and Fikenscher (2012).

The Middle East Is a "Hard Case," but Not a Case beyond Comparison

Although the Middle East poses particularly difficult challenges for creating a WMD-free zone, the history of arms control and the experience of the existing zones suggest that conditions in other regions did not always appear conducive to progress on similar issues, and favorable and unexpected outcomes can occur even in highly unstable and complex situations.¹⁴ The Tlatelolco NWFZ, was not only originally conceived within the highly volatile period of the Cuban missile crisis, with negotiations beginning in 1962, it also involved, albeit with their late ratification, the two nuclear-capable and rival states of Argentina and Brazil.¹⁵ The Central Asia free-zone was considered by many observers a rather "hard case." The region was extensively involved in the nuclear weapons program of the former Soviet Union and, until recently, hosted thousands of nuclear weapons; it still has significant stocks of nuclear materials (uranium and plutonium), research facilities, nuclear experience and technical expertise, and it is surrounded by Russian, Chinese, Pakistani, Indian and Israeli nuclear weapons and borders two regions of proliferation concern (the Middle East and South Asia) (Hamel-Green 2009, p. 358). In spite of these difficult conditions, as was noted at the 2011 IAEA forum on the experience of other regions in setting up NWFZs, "the establishment of NWFZs was possible despite serious obstacles, such as geopolitical complexities, lack of trust, and an often lengthy process of entry into force of NWFZ treaties. This [success] could be achieved through a combination of political will and commitment, dialogue, flexibility, and an incremental step-by-step approach" (IAEA 2011b).

The Middle East Has Made Progress toward the Creation of a WMD-Free Zone

This observation runs sharply contrary to diplomatic wisdom, which holds that at least since the 1995 Middle East resolution of the NPT review and extension conference, or even since the idea was formally introduced in 1974, the Middle East has made no significant progress toward establishing a WMD-free zone (see, e.g., Fahmy 2011). Despite the understandable frustration of regional parties over this issue, the verdict of "no progress" ignores dramatic changes in the region since 1974. These changes include peace agreements between Israel and Egypt and between Israel and Jordan; mutual recognition between Israel and the PLO; the dismantling of WMD programs in Iraq and Libya; accession to the NPT, CTBT, CWC, and BTWC by several states in the region; and the implementation of strengthened IAEA safeguards agreements, including the Additional Protocol in several states. These developments represent significant progress on the path to a WMD-free Middle East.

 ¹⁴ For a sample of lessons for the Middle East from other NWFZs, see, e.g., Fitzpatrick 2012; IAEA 2011b; Cserveny 2004.
 ¹⁵ For a balanced evaluation of the achievements of the established NWFZs, see Hamel-Green (2005, pp. 3-12). See also

¹⁵ For a balanced evaluation of the achievements of the established NWFZs, see Hamel-Green (2005, pp. 3-12). See also Lewis and Potter (2011).

Demand for WMD Is Not Constant (Even in the Middle East)

States' nuclear ambitions wax and wane depending on a variety of factors including the types of threats they face, the preferences of leaders and key members of the ruling coalition, perceived costs, technical capabilities, and normative and political constraints (Sagan 2011, Hymans 2010). The "demand" for nuclear weapons in the Middle East has shifted dramatically since the end of the Cold War, though the changes are seldom acknowledged. Major rivalries that dominated the region's past—for example, between Iran and Iraq, and Egypt and Saudi Arabia—and the competition among external great powers that fed regional strife have disappeared or significantly receded. Proliferation threats in Iraq and Libya have been removed. These developments have weakened proliferation incentives across the region.

Clearly, new proliferation impulses are also present: Iran is on the threshold of a nuclear weapons capability; other states, like Saudi Arabia, have a growing list of reasons to fear Iran getting a nuclear weapon; recent events in Libya demonstrated the risk of not having WMD in the face of a U.S. intervention; and newly empowered Arab publics wonder why Israel should have nuclear weapons and their states should not.

The point is that the proliferation and disarmament decisions are contingent upon a variety of conditions, and the continuing attachment to WMD is not inevitable. Consider how the following developments have affected the risk-benefit calculations of WMD acquisition in the Middle East.

- The past, bitter rivalry between Iran and Iraq is no longer a feature of regional politics. Not only has Saddam Hussein been removed and Iraq been disarmed, but Iraq's leaders now coordinate their policies closely with both Tehran and the United States. Today, the risk of proliferation in Iraq itself is much diminished if not zero (Cigar 2010). Iranian-Saudi tension today in no way resembles the militarized, regime-threatening rivalry that once existed between Iran and Iraq.
- Post-Cold War relations among major Arab states have also moderated. In the 1960s, Egyptian-Saudi relations were so embittered that Egyptian President Gamal Abdel Nasser deployed his country's troops in Yemen to defeat Saudi proxies and used chemical weapons to do the job. No such militarized inter-Arab tensions exist today, even in the face of civil war in Syria.
- The Arab-Israeli conflict, though currently stalemated and crisis-prone (as the recent Gaza conflagration demonstrated), is no longer capable of sparking a region-wide war. The conflict has been reduced to the core question of Israeli-Palestinian relations, which continues to reverberate across the region as a matter of political and humanitarian concern. Although the problem is tragic and vexing, Palestinian rights were not on the minds of protesters who took to the streets in Cairo and elsewhere in the Arab world during the revolutions that shook the

region. Meanwhile, the Palestinians themselves remain divided. This does not mean there will be no subsequent rounds of Israeli-Palestinian violence, but the chance of a major inter-state war threatening Israel's existence is remote.

LESSONS ON REDUCING MISTRUST AND UNCERTAINTY

If the mistrust and uncertainty that plague Middle Eastern states is not completely unique to the region, then what lessons can be drawn from research on how other regions and other negotiating contexts have dealt with these problems? What is known in particular about the relationship between internal political change—a particular source of uncertainty in today's Middle East—and nonproliferation?

Effective Confidence Building Depends on Symmetry and Shared Goals

Parties interested in cooperation but nevertheless harboring deep mistrust of one another need to find ways of providing assurance about their benign intentions. Confidence building measures (CBMs) are a potentially important means of reducing tension and building trust.¹⁶ CBMs are negotiated and agreed-upon cooperative steps that by definition are intended to provide reassurance to all parties and not compromise the security position of any one party. Over time and as part of a broader process of peace-building and arms control, CBMs foster the transparency, communication, and reassurance that can help to transform adversarial relations into amicable ones.

During the Cold War in Europe, both sides shared a concern that misperception of the other's intentions could lead to unintended escalation and conflict. CBMs were seen as a means of reducing the risk of war and creating the conditions for agreement on more fundamental issues. A shared motivation to reduce the risk of armed conflict and a rough symmetry of capabilities made possible the initial rudimentary bilateral transparency measures (such as the hotline between Moscow and Washington beginning in 1963). These initial steps led in the 1970s to the more ambitious multilateral "Helsinki Process" and the establishment of the Conference for Security and Cooperation in Europe. These agreements helped to enable (and were also enabled by) the eventual relaxation of East-West tensions in the late 1980s and beyond. They also helped to legitimize the inclusion of a broad range of issues, including for example human rights, in East-West interactions.

The Middle East also has a modest history of confidence building. The process of Israeli-Egyptian disengagement and separation of forces in the Sinai, beginning in 1974, leading eventually to the 1979

¹⁶ We use "confidence building measures" to refer to the general category of "arrangements designed to enhance assurance of mind and belief in the trustworthiness of states and the facts they create" (Holst 1983). We use CBM to encompass what is often called "confidence and security building measures" or sometimes "interaction and confidence building measures." There is an extensive body of work on the emergence of CBMs in Europe and their applicability to the Middle East. For an account of the emergence and role of CBMs in Europe, see for example Lachowski (2004). For the applicability of confidence building measures in the Middle East, see Jones (2011); Levite and Landau (1997), and Platt (1992).

peace agreement, helped to build confidence between the two parties. Following the 1991 Madrid Conference, the Arms Control and Regional Security (ACRS) process in the Middle East consciously sought to emulate the European CBM experience. The talks made considerable progress—particularly sketching out arrangements for pre-notification of certain military activities, search and rescue, incidents at sea, and other crisis management measures. But the process collapsed due to linkages to bilateral issues, in particular progress on the Israeli-Palestinian track, and to differences over introducing the nuclear issue into the discussion.¹⁷ Unlike the U.S.-Soviet case, the ACRS participants did not share the same fundamental goals and the parties were highly asymmetric in their capabilities and interests. Although ACRS failed to achieve tangible progress on creating a WMD-free zone, it showed that in principle, Arab states were willing to consider a transformation in their relationship with Israel, and that Israel was willing to consider substituting cooperative agreements for elements of a security policy based on deterrence and military superiority.¹⁸

Internal Political Change Can Facilitate Disarmament Steps

The spectacular political changes that have rocked the Middle East can facilitate the creation of conditions that are conducive to establishing a WMD-free zone. Of course, the revolts shaking the Arab world create massive uncertainty, but they also create a great opportunity. The experience from the existing zones demonstrates how democratizing countries are more likely to enter into NWFZ treaties. The Treaty of Tlatelolco extended to the entire Latin American region only after the return to democracy of Brazil and Argentina. Similarly, the political changes in South Africa, which led to the end of the apartheid regime, also led to a breakthrough in denuclearization and the subsequent establishment of the African zone.

As citizens across the Middle East participate more in the political life of their respective countries, they will inevitably exert an influence on the prospects for regional cooperation. While there is an often-stated concern that greater sensitivity to public opinion in the Middle East could lead to more tension and conflict between states, there may also be positive effects for nonproliferation and disarmament. In the demonstrations that shook the region in 2010-2011, Arab protesters demanded less corruption and more government accountability. Large, secretive WMD programs supporting unaccountable military-industrial cliques will be harder to support in the region's emerging political

¹⁷ For a description of the ACRS process and the CBMs agreed to (or nearly agreed to) during the ACRS talks, see Dassa Kaye (2001), Jones (2003), and Landau (2006).

¹⁸ If CBMs are used to exploit the goodwill of another party, or if efforts to enact them fail, they may also have the opposite of their intended effect. A recent case in point was the failed effort to arrange a deal on the refueling of the Tehran Research Reactor. Although the parties were close to an agreement explicitly designed to build trust and buy time for more extensive negotiation, the way in which the negotiation collapsed left each side more suspicious of the other than if they had never attempted an agreement. For competing accounts of this confidence-destroying encounter, see Mousavian (2012, pp. 354-65) and Fitzpatrick (2010).

economies. Moreover, the domestic political struggles underway across the Middle East have both regimes and their opponents focusing inward on reform, not outward on old enemies (Malin 2012b).¹⁹

Harald Müller and Andreas Schmidt have observed that because the leadership of emerging democracies are eager to gain international acceptance for themselves and the political changes they are introducing, the nonproliferation norm seems to exert a powerful effect, causing those with nascent or limited nuclear programs to terminate their activities (Müller and Schmidt 2010). However, they also find that states with well developed, long standing nuclear programs did not reverse themselves once the NPT came into force, in part because entrenched nuclear bureaucracies and political interests were sufficiently powerful to block reversal. If Müller and Schmidt's conclusions are correct, the long-term consequences of the democratization processes underway in the region today would bode well for eventual establishment of a WMDFZ, (although, this phenomenon is likely not to have a direct impact on the well-established Israeli nuclear weapons program).

Meanwhile, in Israel, public opinion on nuclear issues is not well developed, since the topic of Israel's own nuclear weapons is largely censored. However, in a recent opinion poll of Jewish Israelis conducted by the University of Maryland, nearly 65 percent of respondents favored the establishment of such a zone, "provided the effectiveness of this inspection system was fully demonstrated to all countries involved...[and] all countries in the region, including Iran and Israel, would commit to not having nuclear weapons" (Project on International Policy Attitudes 2011).

Regional Verification Mechanisms Can Help Reduce Mistrust

The experience of other regions demonstrates that confidence in the ability to verify the provisions of a zone is a major requirement for successful negotiation and implementation (Lewis and Potter 2011). Verification mechanisms can be strengthened when mistrust is pervasive, as it is in the Middle East, and where, as was the case of the African zone, there is the need to verify the dismantling and destruction of nuclear devices manufactured by a party prior to the entry into force of the treaty (as would be true in the Israeli case). There is not and there will never be a foolproof verification system nor can technical provisions substitute for a minimum of mutual trust. However, on the basis of past experience, one can imagine a successful combination of international, regional, and bilateral verification mechanisms to assure an acceptable level of confidence among the parties of compliance with treaty obligations.

¹⁹The terrorist attack on U.S. personnel in Bengazi, Libya suggests that agents of change in the Middle East are also outwardly focused. In this case, however, the exception appears to prove the rule, since the response was large scale street protests *against* the attack. The external competition for influence in Syria, however, and the narrative of the Assad regime that the conflict in Syria is the result of a conspiracy to assert Western influence over Syria and the Middle East does indeed resemble old-style "blame the outsiders" politics. As noted below, competitive external meddling in the Syrian civil war will undermine prospects for progress toward a WMD-free zone in the Middle East.

To this end, different verification mechanisms exist in different zones, and offer starting points for the Middle East (Heinonen 2012). For example, additional verification and safeguards measures have been created in the Latin American zone, where a specialized ad hoc agency was established (OPANAL). Unlike the NPT, the Central Asia zone obliges the member states to adopt the Additional Protocol; the treaties of Rarotonga and Bangkok complement IAEA safeguards with exchanging reports and other information sharing.

Important lessons can also be learned from the experience of the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), which was established by the two Southern American countries as a bi-national safeguards organization in 1991. ABACC is mandated to verify that all nuclear materials and facilities in the two countries are used exclusively for peaceful purposes. Among other things, it undertakes monitoring and on-site inspections with Argentine inspectors verifying facilities in Brazil and vice-versa. Despite the initial climate of mistrust between Brazil and Argentina, the system of reciprocal inspections significantly contributed to a more positive relationship.

Article 12 of the Treaty of Pelindaba establishes the African Commission on Nuclear Energy (AFCONE) for the purpose of ensuring compliance with the treaty (the Commission is not yet fully operational, however). Another example of regional verification that may have important lessons for the Middle East is the European Atomic Energy Community (EURATOM), created in 1952 to coordinate the European member states' research programs for the peaceful use of nuclear energy and also to assure the non-diversion of nuclear material to military purposes (Mallard 2008).

Nabil Fahmy and Patricia Lewis (2011) propose the establishment of a "Commission on Nuclear Energy on the Middle East" (CONEME), which would have the power to gather its own information, and interact with and transmit reports to the IAEA. It would also be authorized to call—independently of the IAEA—for clarification, technical visits, and inspections when the need arises. While routine inspection of a Middle East free-zone could depend primarily on IAEA safeguards, COMEME could establish, building on the experience of the Pelindaba Treaty, its own inspection mechanisms should the need arise. In addition, states could carry out joint inspections with the IAEA, (involving, for example, three stages: pre-inspection, inspection in situ, and post-inspection) as in the case of the ABACC. CONEME could also be granted the right of a special inspection by a team of qualified inspectors appointed by CONEME (as in the Treaty of Rarotonga). For the purposes of mutual confidence-building, following the example of the Treaty of Bangkok, member states of the future zone could call on another state party for clarification, or for a fact-finding mission to resolve an ambiguous situation or one which may give rise to doubts about compliance. As Fahmy and Lewis observe, "obviously, many of these measures could prove a step too far for the region, but the more that can be

done to increase transparency, reduce threat and build confidence, the better are the chances for an NWFZ in the Middle East" (Fahmy and Lewis 2011, p. 48).

The issue of how to verify the complete and irreversible dismantlement of the Israeli nuclear arsenal would of course present serious challenges. From a purely technical point of view, however, there is previous experience on which to build for guidance. The IAEA has some expertise in dismantlement verification. In the case of the African NWFZ, South Africa dismantled unilaterally its nuclear weapons, but the IAEA verified that the work was done according to what Pretoria had declared. IAEA experts were also involved on the verification of the voluntary dismantlement of the Libyan nuclear program, as well as the forced one of Iraq. Along with the US and Russia, IAEA took part in the so-called Trilateral Initiative (1996-2000) to investigate the technical, legal, and financial issues associated with IAEA verification of weapon-origin fissile material in the Russian Federation and the United States. Experts from nuclear weapons states could be also involved in the verification process of a future WMDFZ in the Middle East, while additional important contributions could also come from non-nuclear weapons states and non-governmental organizations.²⁰

Crises Can Have a Galvanizing Effect

Many pundits have warned that the Middle East is on the verge of a nuclear "tipping point." The people who are in the midst of the crises rocking the Middle East would rightly prefer to avoid the dangers that their situations present. Even those who benefit from the outcome do not generally wish for crises. Paradoxically, however, the sense of urgency associated with contemporary Middle East can create incentives for regional and extra-regional actors to address the WMD issue in good faith. Something of this sort happened for instance in the case of Latin America where the Cuban missile crisis catalyzed efforts to establish a NWFZ; quite similarly, the main reason behind the Pacific NWFZ was the growing concern about environmental pollution caused by nuclear testing and radioactive dumping. In the past, policy makers and regimes of the Middle East were ultimately unable to make progress on regional arms control. While the changes sweeping the region create uncertainty, they will also realign strategic calculations and possibly create new opportunities for cooperative security efforts.

Scholars who have studied complex negotiations have found that crises can have a galvanizing effect on the parties (Hampson, 1995). They dissolve old dogmas, break up blocking coalitions, and move opposing parties toward "consensual knowledge" about the problem. If in earlier decades, leaders in the Middle East drew comfort from their reliance on security doctrines involving nuclear, biological, or

²⁰ An interesting and promising example is the UK-Norway Initiative (carried out with the non-governmental organization VERTIC as an independent observer), that investigates the technical and procedural challenges associated with a possible future nuclear disarmament verification regime. For more information on the initiative, see the Working Paper submitted by the Norway and the UK to the 2010 NPT Review Conference, http://www.mod.uk/NR/rdonlyres/7BB08C10-3CCD-4889-87AE-8E8B21FA5408/0/npt_revcon_2010_jwp.pdf.

chemical weapons, the revolutions shaking the Middle East may also shake that comfort—on all sides—moving parties toward a greater willingness to reconsider cooperative disarmament proposals.

PROCESS LESSONS

If trust were not a major issue between the parties in the Middle East, and if the region's experience with WMD programs were not so traumatic and extensive, then the procedural obstacles blocking progress on a WMD-free zone would not pose such formidable challenges. Nevertheless, getting to a set of linked agreements on fundamental security issues between multiple parties would be complicated in the best of circumstances. One key lesson is that regional institutions have played a significant facilitating role in other NWFZs. Another less is that negotiating complex security issues takes time.

Regional Arms Control Processes Rely on Regional Institutions

Regional organizations have played a critical role in the creation of other NWFZs. The Southeast Asian nuclear weapon-free zone originated in an ASEAN initiative to create a zone of peace, freedom, and neutrality, a central component of which was an NWFZ. It was an ASEAN working group that negotiated the treaty of Bangkok. The Latin American preparatory commission that negotiated the Tlatelolco treaty specified the agreement's compatibility with the rights and obligations emanating from the Organization of American States and the Rio Treaty. The Organization of African Unity declared Africa an NWFZ, and worked through the UN to draft a treaty. The point here is that regional organizations have played a crucial role in the conception, emergence, and establishment of existing regional zones. As experts at the Center for Nonproliferation Studies suggest, regional organizations "provide an avenue towards formalizing proposals and accruing political momentum" (James Martin Center for Nonproliferation Studies 2010).

Arms Control and Disarmament Take Time

NWFZs are generally established after very long, gradual and incremental processes. The Treaty of Tlatelolco was first discussed in the early sixties and opened for signature in 1967. It entered into force in 1969, but did not become practically effective in the whole region until after Brazil and Argentina, the two regional powers, joined the treaty in mid-1990s. The African zone was first discussed in 1964, signed in 1996 and entered into force in 2009 after the 28th required ratification by Burundi.²¹

²¹ The establishment of the existing NWFZs required lengthy phased processes which are likely to be replicated without shortcuts in the Middle Eastern case. All zones went through the following steps: (a) a pre-negotiation phase, which outlined principles, and introduced parties' preferences towards broad parameters that zone would take; (b) negotiation of a treaty text; (c) entry-into-force, through a process of signing and ratifying; (d) institution building and additional accessions; and (e) step-by-step implementation of all treaty commitments and the emergence of a mature treaty and regime (Aboul-Enein and ElBahtimy 2010, 4).

Arguably, however, the process of discussing and negotiating a treaty is itself an important confidencebuilding measure that can promote mutual understanding and trust among the parties concerned.

The experience of East-West arms control negotiations offers a similar story of long years of exhausting talks where the motto "have patience" is perhaps the most important lesson offered by veterans of Cold War (Chrzanowski 1994). For example, the Conventional Forces in Europe treaty (CFE) took over 20 years to negotiate; the Conference on Security and Cooperation in Europe (CFSE) 13 years, the agreement on Intermediate Nuclear Forces (INF) 12 years; and the Strategic Arms Reduction Talks (START) took nine years.

The long period of "pre-negotiation" in the Middle East has understandably led to frustration, particularly for the Arab states that are most interested in engaging Israel in a disarmament process and establishing a WMD-free zone. This frustration causes some states to be inclined toward imposing deadlines and ultimatums. Research suggests that "time pressure can, in certain circumstances, be associated with broad agreements." However, an examination of 68 post-Cold War cases of territorial negotiations revealed that "only low levels of time pressure or its absence are associated with durable settlements," and that "the negative effect of time pressure on negotiations is particularly relevant in the presence of complex decision making and when a broad range of debated issues is at stake" (Pinfari 2011).

WHAT KINDS OF INCENTIVES WILL BRIDGE VISIONS OF THE FUTURE?

It is very unlikely that the parties of the region will ever enter into a sustained effort to establish a WMD-free zone without very significant extra-regional pressure and assistance to compensate for the general lack of trust and cooperation. Although it is understood that the agreements that emerge will be, as all consensus statements on the issue suggest, "on the basis of arrangements freely arrived at by the states of the region," external actors must provide fundamental incentives, institutional, and technical assistance, as well as political pressure. For example, the implementation of negative security guarantees from the United States and other nuclear weapons states will be particularly important to the Arab states and Iran. Positive security assistance will continue to reassure Israel and might help to ease Israeli fears about entering into arms control and disarmament agreements. Finally, offers of access to nuclear energy would be a further incentive to states to help states see the benefits of overcoming their differences.

Security Guarantees

The prospect of gaining negative security guarantees—legally-binding commitments contained in the protocols attached to the treaties, whereby the nuclear weapon states commit not to use or threaten to use their nuclear arsenals against the parties of the zone—was a primary factor in the establishment of

all existing NWFZs (Fuhrmann and Li 2008).²² Negative security guarantees are especially important to states that fear they might be involved in military conflict with a nuclear-armed extra-regional power, (Fuhrmann and Li 2008, p. 2). Despite in-principle support, the nuclear-weapon-states, with the exception of China, have been ambivalent and highly selective in granting security guarantees to specific zones; only the Latin America and South Pacific zones obtained the negative guarantees from all nuclear powers (Hamel-Green 2009 p. 357). In the Middle East, such guarantees will be of critical importance. It is worth noting that the lack of sustained American and international commitment was one of the factors that explained the failure of the ACRS talks held in 1992-95 (Landau and Dassa-Kaye 2012, p. 34). The continuing and intensive involvement of particularly the United States, UK, and Russia—as sponsoring states—in the Middle East WMD-free zone negotiations will be critically important (IAEA 2011b).

Nuclear Energy Cooperation and Other Incentives

A final lesson for the Middle East is that the establishment of an NWFZ increases opportunities for nuclear energy cooperation, as occurred in the cases of Latin America (Carnegie 2009, p. 4) and in Africa through the African Commission of Nuclear Energy (AFCONE). Given the continuing interest in nuclear energy in the Middle East (Ebinger 2011), this could be a powerful incentive for eligible and interested regional parties to support the WMDFZ. Regional cooperation on the peaceful uses of nuclear energy could also help build mutual understanding and confidence among countries in the zone.

If there is significant nuclear energy expansion in the Middle East, the thorny issue of controlling sensitive activities such as enrichment and reprocessing will be very relevant, as the recent history of the international community's efforts to keep the Iranian nuclear program under check shows. The negotiation process toward a WMDFZ in the Middle East could include a discussion of multinational or regional oversight of existing enrichment and reprocessing.²³

LOOKING BEYOND 2012: KEY ISSUES

The lessons outlined above could point the way to progress toward establishing a zone in the Middle East. But will they? Lessons are valuable only if they are applied. The most serious past attempt at discussing arms control and regional security in the Middle East failed in the 1990s; arguably, the

²² For example, Sonia Fernández-Moreno of the Argentinean Nuclear Regulatory Authority recalled negative security assurances were a driving factor that led the agreement on the Tlatelolco treaty of the Latin American zone (Carnegie 2009).

²³ Lorenz and Kidd (2010) explore how such a regional discussion might unfold in the context of an emerging WMD-free zone in the Middle East. An interesting, although unsuccessful, attempt at banning indigenous enrichment and reprocessing is included in the Joint Declaration on the Denuclearization of the Korean Peninsula of 1992.

conditions were more conducive at that time than they are now. Given past failures and deep differences between the parties, why might leaders be inclined to learn from such lessons and begin to shift their positions? Are the obstacles described above likely to grow or recede in significance? We believe the answers to these questions depend crucially on the development of three key issues. These issues are the Iranian nuclear stalemate, Israel's strategic outlook, and the fate of Syria.

THE OUTCOME OF THE IRANIAN NUCLEAR STALEMATE

The outcome of the standoff over Iran's nuclear program will have a decisive effect on the prospects for progress toward a WMD-free zone in the Middle East. A peaceful resolution of the stalemate would contribute to the effort to establish a zone. The prospects for progress on regional WMD issues will brighten if Iran is able to strike a deal with the P5+1, restore confidence that it is adhering to its international obligations, and take other steps to assure its neighbors of its peaceful intentions. (Such steps might include, e.g., implementing the Additional Protocol, shipping stocks of its enriched material for fuel fabrication outside of the country, ceasing to enrich uranium to higher levels, and refraining from needlessly provocative statements about other states in the region.) Under such circumstances, Iranian-Israeli tensions would likely ease, as would Iranian tensions with Saudi Arabia.

If, however, continuing doubts about Iran's intentions result in a U.S. or Israeli attack, the prospects for improving regional security in general and for the establishment of a zone in particular will further recede. Most analysts agree that military action against Iran would lead to increased regional tension (e.g., Kam 2007; Kahl 2012; Iran Project 2012). For example, in the context of an attack, Iran might ask IAEA inspectors to leave, or even announce its intention to withdraw from the NPT. If its nuclear ambitions were made stronger by an attack, then confidence in the value of WMD discussions would be further diminished. The security deficit that confidence building measures would need to fill would be far larger than it is under current circumstances.

Iran itself may come to see the WMD-free zone discussion as an opportunity to advance its interests. Iran supported the establishment of an NWFZ in the past, and in early November 2012, Iran announced its intention to attend the proposed WMD-free zone conference. But its position since the 2010 NPT review conference toward the 2012 proposal has been less than constructive.²⁴ Nevertheless, Iran has important security interests in pursuing a WMD-free zone. Iran has a strategic interest in denuclearizing Israel, and negotiations on a zone are essentially the only way to accomplish that objective. Iran would also find other security benefits from engaging on the WMDFZ issue: regional security discussions can help Iran break out of isolation; in WMDFZ discussions, Iran can work to split

²⁴ Iran did not participate in the November 2011 IAEA-sponsored Forum on the experience of other regions in creating WMD-free zones. Iran's public position has been to call on Israel to declare its arsenal and be disarmed, upon which the de facto establishment of a zone would be complete (see, e.g., Grossman, 2012).

the U.S.-Arab coalition against Iranian nuclear development and focus attention on Israel's nuclear weapons; and finally, the creation of a zone, if it were to occur in the next several years, would leave Iran far ahead of its Arab neighbors in fuel cycle and latent nuclear weapons capability, while reducing the incentives for its neighbors to attempt to match its investment.

ISRAEL'S STRATEGIC OUTLOOK

Israel's participation in a process to establish a WMD-free zone is uncertain, and Israeli leaders have long been openly skeptical about the utility of a conference on this issue.²⁵ Inescapably, the long-term viability of any process to establish a WMD-free zone in the Middle East depends on Israel's participation; and Israel's participation will in turn depend on the strategic choices it makes on two fundamental issues— the future of its nuclear weapons policy and its relations with the Palestinians.

Israeli Nuclear Policy

Israel's nuclear monopoly is under threat due to Iran's advancing nuclear capability, and over the longer term, due, potentially, to the growth and spread of nuclear energy in the Middle East and the new political forces shaping the region. In response to the changing strategic environment, Israeli leaders must choose among four alternative security strategies. The options are (1) prevention: attempting to extend its nuclear monopoly by preventing the emergence of nuclear capability in neighboring states through a combination of diplomatic effort, sabotage, and the use of military force; (2) deterrence: entering into and managing an active nuclear deterrent relationship with Iran and, eventually, perhaps other states in the region; (3) alliance: seeking and accepting formal security assurances from the United States; or, (4) collective security: entering into negotiations with its neighbors to establish a regime that will regulate security relationships in the region, eventually putting its own capabilities on the negotiating table.

Although these options are not mutually exclusive, in combination they do not co-exist easily and in some cases may be directly contradictory. From an Israeli perspective, none of the alternatives appear very attractive.

The first option, prevention, involves of maintaining Israel's monopoly through the use of force (Israel's strategy for the past several decades), and is becoming increasingly untenable. The practical

²⁵ Prior to the postponement of the proposed 2012 conference, Shaul Chorev, head of the Israeli Atomic Energy Commission, made one of the only official statements on the question of Israel's participation. Chorev's statement, delivered at the September 2012 IAEA General Conference in Vienna, was widely interpreted in both Israeli and international media as a rejection of the 2012 conference. But he did not in fact close the door on Israel's participation. Chorev said: "Any initiative to promote the 2012 conference on the Middle East under the banner of the NPT review conference, or the General Conference of the IAEA in complete disregard to the present regional somber realities, is futile." (Chorev 2012, p. 6)

constraints on using force and sabotage (intelligence, force projection), the political and military costs and risks of this policy (retaliation, condemnation, isolation), and the unintended consequences (driving the rival program further underground, hardening hostile intent), make the policy highly unattractive, at least as long as the United States refuses to join in a military operation (Brom, Feldman, and Stein 2012). Even those observers who believe preventive attacks have been effective in the past must concede that sustaining the strategy in a region in which there is growing interest in nuclear power and a progressive diffusion of nuclear technology and know-how will likely prove impossible.

The second option—deterring a nuclear Iran—is costly and entails significant risk; indeed, deterrence and containment have been considered "unthinkable" in the public discussion of Israel's options.²⁶ The difficulties with this course of action are numerous: accepting even the remote possibility of a nuclear attack on Israeli soil would make Israel's own nuclear deterrent considerably less reassuring to its people; if other states beyond Iran acquire nuclear weapons in response to Iran, the danger to Israel of misperception and miscalculation would be multiplied; and deterring Iran could eventually result in an end to Israel's highly convenient policy of nuclear ambiguity, since maintaining an active deterrent through periods of crisis and change in Iranian capabilities might necessitate demonstrations of Israeli capability. At least in the short- to medium-term, if Israel chooses either military prevention or active deterrence it will undermine or prevent progress on cooperative security negotiations and a WMD-free zone.

Washington might be willing to offer Israel a formal security guarantee—the third option—taking Jerusalem under the U.S. "nuclear umbrella," but Israeli leaders in the past have been loath to consider paying the price of such a guarantee in terms of political independence. Israeli former deputy national security advisor, Chuck Freilich (2012), observed that relying on a U.S. security guarantee "contradicts fundamental tenets of Israel's national security doctrine," and might generate pressure that Israel "expose or dismantle its strategic capabilities." Freilich also noted that in light of the rapid pace of events in the Middle East the United States might be hard-pressed to intervene on Israel's behalf in a crisis in a timely manner.²⁷ No Israeli leader since Ben Gurion has been willing to rely on others to guarantee the state's basic survival. Closer alignment with the United States is not incompatible with progress on regional security, though it may be seen as threatening to other parties in the region.

The fourth option, regional security cooperation leading to the establishment of a WMD-free zone has been long opposed by Israel for several reasons, both substantive and procedural.²⁸ Israeli policy

²⁷ Despite the drawbacks, Freilich suggested that the U.S. security guarantees may be the "least bad" of a bad set of options. ²⁸ Levite (2010) spells out Israeli arguments and approaches to the WMD-free zone proposal.

²⁶ An exception is Efraim Kam (2007) who carefully considers the implications for Israel of dealing with a nuclear-armed Iran. A policy of containment toward Iran has been effectively beyond consideration in the United States as well. A thoughtful exception is Reardon (2012).

makers are unwilling to negotiate away the country's nuclear deterrent while there is any question of an existential threat materializing; Israel's formula has long been "peace before disarmament." Relying upon treaties and agreements for security is also seen as objectionable, given the history of cheating and noncompliance, in particular on WMD issues, in the Middle East. Even beginning such a discussion is difficult because of Israel's policy of nuclear ambiguity and nonmember status in the NPT.

Without a doubt, Israel would prefer not to choose and to continue its current policy which combines prevention (when needed to maintain its monopoly), deterrence (with ambiguity), and alignment with the United States to maintain a qualitative military edge (but without a formal security guarantee). But tensions between the options are likely to grow with time and choices may become necessary. The policy of prevention is increasingly incompatible with reliance on U.S. support—as U.S-Israeli tension over Iran has demonstrated. Prevention and deterrence are ultimately opposing rather than complementary policies; if the adversary believes preventive war is likely, deterrence will fail as the incentive preempt grows. Alliance and deterrence policies also work at cross purposes, as noted above.

In light of this menu of choices, the final option of entering into negotiations on a WMD-free zone may come to be seen in Israel as the least unpalatable of the four. This approach would allow Israel to prolong its nuclear weapons monopoly with the fewest challenges for an interim period, while negotiating the terms of a transition to a nuclear and WMD free Middle East.

Israel-Palestinian Relations

The collapse of even a semblance of progress toward an Israeli-Palestinian peace casts a shadow over efforts to create WMD-free zone. Israel understandably insists that disarmament must follow regional peace and normalization. But Israel's neighbors point to the disintegration of Israeli-Palestinian negotiations and Israel's earlier rejection of the Arab peace initiative as evidence that Israel is unwilling to take "yes" for an answer to its yearning for acceptance.²⁹ If Israel were to take tangible steps to restart discussions with the Palestinians, the atmosphere surrounding future WMD-free zone process would improve significantly (just as Israeli-Palestinian negotiations contributed to the conducive atmosphere surrounding the ACRS talks). If stagnation persists in Israeli-Palestinian relations, or worse, if violence escalates, then these tensions will undermine and could foreclose opportunities for progress on WMD issues (as the recent Gaza conflict demonstrated).

²⁹ Israeli reactions to the Arab peace initiative were mixed and no formal, detailed response was offered. Shimon Peres, then the foreign minister, characterized the initiative as "important" but suggested progress toward peace could only occur through direct negotiations with the Palestinians (Israel 2002).

THE FATE OF SYRIA

After more than a year of tragic civil war in Syria, it is by now cliché to suggest that the collapse of the Assad regime in Syria appears both inevitable and impossible to predict. Neither the regime nor the opposition seems to have sufficient resources to prevail in the current conflict. The slow and violent descent to civil war has both polarized and been partially driven by the policies of regional actors with a stake in the outcome.

The longer the conflict persists, and the more violent it becomes, the more damaging the effect will be on the prospects for progress on a WMD-free zone. Syria's uncertain fate increases insecurity in Iran and Israel, creates tension between Iran and Saudi Arabia, undermines the already tenuous stability in both Lebanon and Iraq, draws Turkey further into the regional system, and increases division among the P-5. There has been growing concern about Syria's chemical weapons stocks—including fears that chemical weapons could fall into the hands of terrorists in the midst of the chaos or that the Syrian government will use these weapons against its own population. The struggle over Syria was at the center of Cold War tensions in the Middle East in the 1950s and 1960s (see, e.g., Seale 1987; Kerr 1971) and helped to fuel the pursuit of WMD across the region including Israel's nuclear program. Today, growing region-wide tension over Syria will undercut incentives to enter into serious regional discussions of WMD. Conversely, cooperative international efforts to facilitate a transition in Syria are essential for creating the conditions for progress toward a WMD-free zone.

CREATING CONDITIONS FOR PROGRESS: CONCLUSIONS AND RECOMMENDATIONS

The establishment of a zone is a long-term prospect. Progress toward that end, should it occur, will be incremental and will occur on multiple tracks. The steps that build confidence in cooperative security measures will not be only those focused on WMD arms control and disarmament—indeed, early in the process, more often than not the most important confidence building measures will have only an indirect relationship to nuclear, biological, and chemical weapons and their delivery systems. Negotiations will only bear fruit after the rigid positions of the past several decades begin to shift and new coalitions begin to form. We conclude with a number of recommendations focused not so much on end-game steps but rather on interim measures that will help create the conditions for productive negotiations.

IRAN, ISRAEL, AND SYRIA: THE NEED FOR RESTRAINT

Managing and resolving major conflict in the Middle East is an urgent imperative for its own sake and would generate much more significant benefits than merely aiding in the creation of a WMD-free zone. Nevertheless, we offer these thoughts on Iran, Israel, and Syria since each is so inexorably tied to the prospects for progress on establishing a WMD-free zone in the Middle East. In all three cases, the most important recommendation is for all parties to act with maximal restraint.

End the Standoff with Iran

Given the level of mutual mistrust, a grand bargain to end the stalemate with Iran is a distant prospect. But several interim steps are possible, involving concessions from both the Iran and the Western powers that could break the logiam, reduce tension, test Iranian intentions, and provide greater transparency on Iran's nuclear activities. The most urgent objectives for the P5+1, as well as for Iran's neighbors, are to increase the time and effort needed for Iran to "break out" and produce a weapon, and to strengthen verification of Iran's nuclear activities. These objectives could be achieved on an interim basis if Iran ceased enrichment of uranium to higher levels, shipped stocks of its enriched material out of the country for fabrication into fuel elements, and implemented the Additional Protocol. For Iran, the most urgent goal is gaining relief from sanctions and an assurance that it will not be attacked. An initial and potentially constructive initial bargain would be a quiet agreement for Iran to suspend 20 percent enrichment in exchange for an assurance no attack would be mounted or threatened as long as negotiations are ongoing. A next step might be an agreement to ship out, on an ongoing basis, stocks of enriched material and implementation of the Additional Protocol in exchange for graduated sanctions relief. Such an agreement would constitute a de facto acknowledgement of Iran's right to enrich. The reduction in tension with Iran would have a significant and salutary effect on the chances for progress on regional security and arms control in the region.

Get Israel on Board

The recent crisis in Gaza demonstrated how Israeli-Palestinian violence can undermine prospects of progress on wider regional security issues. Israel should avoid taking provocative actions—such as settlement building and targeted assassination—that increase uncertainty and instability in the region. Military action against Iran, though for now not an imminent threat, also falls squarely under this heading. It is urgent that Israel take bold steps to restart discussions with the Palestinians which would also improve the atmosphere of cooperation with Arab states more generally.

Israel must begin to grapple with the implications of an unsustainable status quo. The most important trends and processes that are shaping Israel's security environment—the rise of political participation in the Arab world, the diffusion of technology, the erosion of U.S. influence in the Middle East—are largely autonomous and will force an eventual reconsideration of Israel's strategic policies, regardless

of the WMD-free zone initiative. States of the region can help channel that reassessment away from strategies of prevention and deterrence and toward more cooperative regional approaches. The single most important step the Arab states and WMD-free zone conference sponsors can take to encourage Israel's participation is to agree on the establishment of a regionally based security forum with independent convening authority (see below) to carry on the discussions. Such a regional umbrella need not interfere with the mandate of the NPT review conference, but rather would complement it in a way that would facilitate Israel's participation as a non-member of the NPT. Given such an opportunity, Israel may come to see that entering into discussions on establishing a WMD-free zone is in its own best interest.

Regime Transition and WMD Disarmament in Syria Requires Inclusive International Management

While stagnation appears to be an ongoing feature of the Syrian civil war, conditions on the ground are fluid; violence has become more brutal and sectarian. It is hard to imagine productive discussions of a WMD-free zone in the Middle East while the civil war drags on and polarizes the region. There is an urgent need for increased international coordination to avoid a spillover of the conflict to neighboring countries, promote de-escalation, and facilitate the necessary negotiation of terms under which the inevitable transition will occur. Though they are indeed strange bedfellows, the United States, Russia, and Iran—all three now key players in the Syrian civil war—share a strong interest in preventing a Salafist takeover of opposition forces. This tacit coalition of interest should be exploited to coordinate where possible a de-escalation of the conflict. In any event, Russian and Iranian cooperation will be needed and should not be excluded from post-conflict planning.

In the meantime, Iraq must be pushed to crack down on arms shipments to regime forces. The emergence of the new National Coalition of Syrian opposition forces is a welcome sign; if it demonstrates continuing cohesion and functionality, it should gain increasing international recognition. In the meantime, it is critical that President Assad make every effort to guarantee the security of his chemical weapons and pledge not to use them. Disarmament of Syrian chemical weapons should be part of any negotiated transition in Syria and a condition for international support of a new Syrian regime.

REDUCING UNCERTAINTY AND BUILDING TRUST: NEAR-TERM MEASURES

In addition to the above measures, many of the highest priority steps states should take in the coming days and months are unilateral demonstrations of their support, in principle, of a process to establish a WMD-free zone. Such measures include giving full support to the facilitator, declaring support for the establishment of a zone, explaining and exchanging perceptions of threat, and taking any number of steps to strengthen support for various WMD nonproliferation controls.

All of these measures are meant to help create conditions for real progress by providing reassurance that cooperative measures will be reciprocated. While traditional security-building measures designed to reduce the risk of surprise attack or of crisis escalation may be welcome, much broader political measures, unrelated to WMD or military threats must be pursued. Such measures should focus on increasing openness and transparency, creating new pathways of communication, assuring others of peaceful intent. Governments in the region should adopt a measure of self-restraint, in particular in the use of inflammatory language toward their adversaries in the region. Such an action if widespread would have important tension-reducing effects.³⁰

One near-term step should be negotiated: it is an agreement on a declaration of principles to guide the process of negotiation.

Give Full Cooperation to the Facilitator

All parties in the region must offer their full cooperation to whatever processes the facilitator outlines for an initial meeting and continuing steps. Participation of all states in the initial conference is essential if the initial Helsinki meeting is to mark the beginning of a more intensive engagement on WMD issues. Public statements, particularly from Israel (now that Iran has announced its intention attend), indicating its willingness to participate in good faith in early 2013 would ease uncertainty about the fate of the initial meeting.

Declare Support for Zone Concept

Every state in the region has expressed support for the concept of establishing a WMD-free zone in the Middle East. Governments participating in an initial conference should publish statements reaffirming their support for the creation of a WMD-free zone and specify the conditions under which they would be willing to join such a zone. Such statements should ideally be published in advance of an initial conference.

Exchange Threat Perceptions

A serious process aimed at creating a WMD-free zone and a more secure, stable system of relations in the Middle East must begin with an accurate diagnosis of the problems to be overcome. States participating in WMD-free zone discussions should exchange memoranda through the facilitator detailing their respective perceptions of national security threats, particularly those that bear directly on the need for maintaining military capabilities enabling an armed response. Such an exchange would

³⁰ See Jones (2011, pp. 27-28) for a helpful list of principles for guiding the adoption of confidence-building measures in this context.

inevitably produce cross-cutting coalitions and reduce polarization in ongoing complex negotiations of WMD-related issues.

Encourage Unilateral and Sub-Regional Initiatives

Independently from the formal WMD-free zone negotiation process, regional states should take unilaterally or in a sub-regional setting any possible initiative that can advance progress toward the end goal of a WMD-free zone.³¹ Beyond unilateral accession (or a pre-accession) to global disarmament treaties (which at the moment might not be a viable option for many countries of the region), more realistic examples include national implementation of nonproliferation measures and best practices through legislation, regulations and institutional developments; promotion of national or multinational human capacity schemes in chemical, biological, radiological and nuclear (CBRN) safety, security and nonproliferation; implementation of voluntary reporting mechanisms; cooperation in peaceful uses of nuclear energy and technology. An illustrative instance of the latter possibility is the Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) initiative, which is under construction in Jordan under the auspices of the United Nations Educational, Scientific and Cultural Organization (UNESCO). Its current members include Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, the Palestinian Authority, and Turkey.³²

Agree on Principles

Regional states should agree on general principles to guide their discussions. It would be a relatively simple matter to draw on language from existing consensus documents, for example, from UN General Assembly resolutions on the establishment of a NWFZ in the Middle East (Fitzpatrick 2012, p. 20). However, such principles should also go beyond existing resolutions to include language committing parties to the cooperative pursuit of peace and security for all regional states, the upholding and strengthening of nonproliferation efforts, and participation in an ongoing and incremental process.³³

GETTING THE PROCESS RIGHT

Establish a Regional Security Forum

The states of the region should establish a regional forum for discussing security issues of mutual concern. The process of addressing WMD and other Middle East regional security issues must be built

³¹ Chen Kane suggested the replication of the "Nuclear Security Summit model", whereby every invited country brings to the conference a 'house gift' to signal good faith and commitment (Chen Kane, "Bad Timing but Still Some Hope", in Bilal Y. Saab (ed.), *The 2012 Conference on a Weapons of Mass Destruction-Free Zone in the Middle East. Prospects, Challenges, and Opportunities*, A Special Roundtable Report, Monterey Institute of International Studies, Monterey, CA,

^{2012,} available at: http://cns.miis.edu/opapers/pdfs/120731_mideast_wmdfz_conf_roundtable.pdf.

³² For more information on this initiative see SESAME' webpage at: http://www.sesame.org.jo/sesame/.

³³ A number of the background papers of the Second EU Non-Proliferation Consortium, Brussels, (November 5-6) propose principles for negotiation. See in particular papers by Müller, Jones, Levite, and Fahmy, (2012).

on a regional foundation. The 2010 NPT review conference sparked important movement by insisting on the current effort, and it recognized its own limitations by appealing to the U.N. Secretary General to appoint a facilitator. To capitalize on the initial momentum, the process must be formally seated in the Middle East. Not only is the task of ridding the region of chemical and biological weapons and their delivery systems beyond the NPT's purview, since the NPT's authority does not extend to Israel, a new regional source of convening authority must be established. The forum could serve as an umbrella for discussions of regional security cooperation, a coordinating body for ongoing discussions of WMD issues, a host for information exchange and other transparency measures, and a site for the negotiation of confidence building measures. The NPT co-sponsors and facilitator of the WMD-free zone initiative would take part in the regional security forum's discussions and report on progress (or the lack thereof) to the NPT review conference.

Simplify and Separate the Issues

Given the number of different issues, actors, interests, and processes at play in discussions of a WMDfree zone, it is essential to separate issues into their component parts to begin to bridge positions and solve the problems that separate the parties. The ACRS talks were part of a larger set of bilateral and multilateral tracks that were established to simplify and separate the issues. Unfortunately, the linkage of the multilateral and bilateral tracks meant that implementation of creative and even path-breaking confidence and security building measures was held hostage to a breakthrough on Israeli-Palestinian talks. The agenda of issues covered in the current initiative should be broad, to cover all parties interests, including bilateral political issues if the demand arises; however, to avoid wading into known quagmires, the working groups for dissecting those issues should be narrowly focused. Discussions should be simultaneous and continuous, and they should take place without formal linkage.

Open Up the Architecture

A regionally based forum for ongoing discussion of security issues should be relatively open, since not all parties in the region have significant stakes in all the issues, and parties from outside the region may also have important contributions to make to the discussions. Beneath the structure of a regional security forum, governments may wish to convene or encourage several layers of discussion. Some talks should be formal and intergovernmental, allowing parties to meet face to face, establish positions, and engage in negotiation. Other talks will be technical, in which experts aim at problem solving. Nongovernmental groups may have important contributions at various points in the ongoing discussion. And informal or track II discussions will be an essential vehicle for progress. The regional security forum should have a mandate to convene all layers of discussion and negotiation directly, without the need for external facilitation (Jones 2009-10).

Maintain Ongoing, Coordinated External Support

Given the complex political and regional security context of the Middle East, it is unlikely that a WMDFZ will ever be achieved without significant extra-regional pressure and assistance. It is reasonable to expect that the United States could play a catalytic role in the negotiations, in concert with the other designated sponsors, the U.K. and Russia. The United States maintains a significant military presence in the region, has deep experience with key Middle Eastern countries (such as Egypt, Israel, and Saudi Arabia and other Gulf States), and plays a dominant role in Middle East conflict management and security perceptions. The United States, in particular, should support the facilitator to make the initial meeting and follow-on steps a success and should bring pressure and inducements to bear on parties in the region to ensure that these initial contacts are productive.

BEYOND THE NEAR TERM: AN INCREMENTAL APPROACH

From this analysis, it is clear that the Middle East is too volatile and problematic for the proposed WMD-free zone to be successfully accomplished in the short term. Between stalemate and the maximalist goal of the "all-at-once" model, it is nonetheless possible to identify intermediate and realistic approaches whereby the process can be broken down into smaller and more manageable steps. We draw on several proposals of this type that have been made in the past.

A 1990 UN experts' study of the Middle East NWFZ concept elaborated a step-by-step strategy that could possibly be applied without compromising the security of the parties. This strategy would consist of incremental steps, starting from confidence-building measures (regional test ban, a fissile material cutoff, IAEA safeguards acceptance, accession to NPT) and following with the provision of negative nuclear security assurances by NWSs. The proposed strategy would also involve moving from declarations of existing nuclear materials to positive security assurances for external powers and finally to the development of effective regional verification systems.³⁴ Another 2004 UN report proposed a similar sequential three-step approach. It included first, the adoption of confidence and security building measures coupled with a "no-first-use" declaration by all parties; second, the verified capping of existing WMD stocks and a freeze on the production of fissile materials; and third, the actual establishment of a WMD-free zone through the gradual elimination of WMD stockpiles following the normalization of relations between Israel and its neighbors.³⁵

A sequential method could also be effectively applied to the geographical scope of the zone. A 1989 IAEA study distinguishes "essential" and "marginal" states within the Middle East region. A 1990 UN report similarly distinguishes between "core countries" and "peripheral" ones.³⁶ Leonard and Prawitz

³⁴ UN Document A/45/435, New York, UN, 1990.

³⁵ Kadry Said (2004).

³⁶ UN Document A/45/435, New York, UN, 1990.

(1999) suggest that the free zone could start out with a small core of states, while other states would be allowed to delay entry. A similar path was, for example, successfully applied in the case of the Latin American NWFZ. Holøien (2006, pp. 24-28) proposes that the zone could initiate from the sub-complex of the Gulf states³⁷ and, on the basis of an "open door policy," gradually expand to include the Levant sub-complex.

Israeli security concerns and the dismantling of its nuclear arsenal could also be addressed through an incremental approach. Depicting nuclear reversal as a process that unfolds over a period of time rather than during a moment in time, Jones (2005, pp. 10-11) suggests Israel should be allowed a period of "hedging." This provision is needed to meet the understandable preoccupations of states "who may be prepared to sign on to a general declaration of intent or indicate a willingness to eventually sign on to a treaty but for whom the decision to do so is not entirely final until they are absolutely convinced that they will never require a WMD option."

The details of a road map to a WMD-free zone in the Middle East will emerge from a process of negotiation. At this stage what is needed is the general agreement—yet to be secured—that the destination of a WMD-free zone is a desirable one; that all states in the region should enjoy the benefits in peace and security; that getting there will be a long and difficult process; and that engaging continuously with others to find the way to a WMD-free zone is better than the conceivable alternatives. It is impossible to know whether the Middle East will soon embark on a more intensive process of finding cooperative solutions to regional security problems, eventually establishing a WMD-free zone, or whether this effort like others before it will crash on the rocks of mistrust, suspicion, and continuing violence. It is clear, however, that if governments of the region refuse even to attempt to engage with one another on these difficult issues, the likely result will be less security and more proliferation. Beginning a process constitutes progress.

³⁷ In 2005 the Secretary-General of the Gulf Cooperation Council (GCC) proposed without success the establishment of a WMDFZ among the GCC states together with Iran, Iraq and Yemen. For an analysis and official documents of the Gulf WMD-free zone, see Gulf Research Center (2007).

APPENDIX: NUCLEAR WEAPON FREE ZONES

A NWFZ is a geographical region in which states may not build, possess, transfer, deploy, or test nuclear weapons. A formal definition of the concept is provided by the UN General Assembly Resolution 3472 B of December 11, 1975, which states:

A 'nuclear-weapon-free zone' shall, as a general rule, be deemed to be any zone, recognized as such by the General Assembly of the United Nations, which any group of States, in the free exercise of their sovereignty, has established by virtue of a treaty or convention whereby:

a) The statute of total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone, is defined;

b) An international system of verification and control is established to guarantee compliance with the obligations deriving from that statute (United Nations 1975).

RATIONALE

The immediate purpose of NWFZs is to provide reassurance on nonproliferation through binding obligations delineated and agreed to by treaty. NWFZs are complementary elements in the regime developed as part of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and effectively contribute to compliance and implementation. NWFZs are intended to enhance the security of a given region's states and, by extension, the security of the international system as a whole. NWFZs also foster long-term global disarmament by effectively fencing off entire regions of the world from nuclear weapons (Parish and Du Preez 2006, p. 2). The establishment of regional NWFZs gradually expands the areas of the world "from which nuclear weapons are prohibited to a point where the territories of powers which possess these terrible weapons of mass destruction will be something like contaminated islets subject to quarantine."³⁸

³⁸ The quote is from the Mexican diplomat Alfonso Garcia Robles, later Nobel Peace Price winner for his role in the creation of the Latin American NWFZ. See Alfonso Garcia Robles, speech before the United Nations, UN A/C.1/PEV2018, 13 November 1974, 32, cited in Robles (1979, p. 8).

NUCLEAR WEAPON FREE ZONES

At present, there are five NWFZs, which cluster in clearly identifiable regions.³⁹ The legal authority to establish nuclear weapon-free zones derives from Article 53 of the UN Charter, which recognizes the role of regional arrangements and agencies in the maintenance of international peace and security. The NPT also foresees the creation of NWFZs. Its article VII states, "Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories." With a total of 112 member countries, the five zones virtually cover the entire Southern Hemisphere. Known also according to the names of their establishing treaties, the zones are as follows.

The Latin America and Caribbean NWFZ (The Treaty of Tlatelolco) was signed and ratified by all 33 countries of the region. This treaty was the first NWFZ to cover a densely populated area. It opened for signatures in 1967 and entered into force in 1969. It originated in response to the Cuban missile crisis of 1962 and the consequent desire of the states in the region to promote complete denuclearization. The zone includes two long-time rivals, Argentina and Brazil, both of which were, at the time of the treaty, ruled by military governments that sought to acquire nuclear weapons capabilities.

The South Pacific NWFZ (The Treaty of Rarotonga) includes 13 members of the Pacific Islands Forum. Its zone of application extends horizontally from the west coast of Australia to the boundary of the Latin American NWFZ, and it includes an extensive part of the South Pacific from the equator southward to the Antarctic demilitarized zone. Opened for signature in 1985, it entered into force in 1986. This free zone originated from the concern of its member states over the many nuclear tests conducted in the South Pacific from the late 1940s to the 1960s, first by the United States (106 tests) and the United Kingdom (21 tests) and later by France (193 tests from 1966 until 1996).

The Southeast Asia NWFZ (The Treaty of Bangkok) includes all ten ASEAN countries. Open for signature in 1995, it entered into force in 1997. Although this zone was conceptualized in the early 1970s, its implementation was hampered by the unstable geopolitical situation in the region and made progress only when the United States withdrew its military forces (including nuclear weapons) from the Philippines in 1992.

The African NWFZ (The Treaty of Pelindaba) covers all 53 countries of the African continent. Opened for signature in 1996, it only entered into force in 2009. Like the South Pacific NWFZ, the initial drive for denuclearization originated with protests over nuclear testing in the region. However, the realization of this treaty proved unfeasible in the context of the Cold War. The end of the bipolar confrontation and of the apartheid regime in South Africa led to a breakthrough that resulted in the dismantling of the South African nuclear program in 1991 and its accession to the NPT.

The Central Asia NWFZ Treaty (CANWFZ) comprises five Central Asian states (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) in an area of great strategic relevance in which thousands of Soviet nuclear weapons were deployed during the Cold War. It is the first zone located entirely in the Northern Hemisphere. Opened for signature in 2006, it entered into force in 2009.

In addition to these existing NWFZs, other arrangements that foresee the denuclearization of specific uninhabited areas include the Antarctic Treaty, (1961), the Outer Space Treaty (1967), the Moon Agreement (1984), and the Seabed Treaty (1972). Also, Mongolia declares itself (1992) and is internationally recognized as a single-state NWFZ (1998). Finally, there are a number of countries (e.g., Austria and Japan), provinces and cities that possess national policies or laws prohibiting deployment of nuclear weapons on their territory. However, those policies and laws are not internationally recognized.

³⁹ The information in this section draws from material produced independently for the Nuclear Threat Initiative (NTI) by the James Martin Center for Nonproliferation Studies at the Monterey Institute of International Studies and available at < www.nti.org/h_learnmore/nwfztutorial/index.html>. See also Hamel-Green (2005).

SPECIAL FEATURES

Nuclear weapons-free zones complement and reinforce the NPT regime by demanding a higher level of commitment from regional member states as well as from extra-regional nuclear-weapon states (NWSs). This purpose is achieved in several ways. First, the states in a NWFZ are required to go significantly beyond the NPT's Article II prohibitions against manufacturing, acquiring, or transferring nuclear weapons or other nuclear explosive devices. The principles and guidelines for establishing NWFZs that are articulated in the UN Disarmament Commission report of April 30, 1999 prescribe a far more comprehensive prohibition, stating that a "nuclear-weapon-free zone should provide for the effective prohibition of the development, manufacturing, control, possession, testing, stationing or transporting by the States parties to the treaty of any type of nuclear explosive device for any purpose, and should stipulate that States parties to the treaty do not permit the stationing of any nuclear explosive devices by any other State within the zone." (United Nations Disarmament Commission 1999, art. 33). The prohibition against stationing or basing nuclear weapons inside the zones is especially relevant from a security and nonproliferation perspective.⁴⁰ The NPT does not explicitly forbid, or remains purposefully ambiguous about, the deployment of nuclear weapons belonging to NWSs on the territories of non-nuclear-weapon states (NNWSs) in cases where control of the weapons is not transferred—as was the case with Soviet nuclear weapons deployed in Warsaw Pact countries and as is still true for U.S. forward-deployed tactical nuclear weapons in Europe.

In addition to requiring more comprehensive prohibitions against the manufacture, acquisition, and transfer of nuclear weapons than are specified in Article II of the NPT, NWFZs provide legally-binding "negative security assurances" from NWSs. All existing NWFZ annex protocols, which contain the rights and obligations of non-regional states among other stipulations, prohibit the NWSs from using or threatening to use nuclear weapons against any country in the respective zones.⁴¹ This provision produces favorable nonproliferation and security implications within the zones because it strongly restrains the coercive use of nuclear weapons by the NWSs. However, the process of ratification by the NWSs of the NWFZ protocols containing the negative security guarantees has encountered serious problems in various zones. Only the protocol of the Tlatelolco Treaty of the Latin American region was signed and ratified by all NWSs, while the protocols of the NWFZs of South East Asia and Central Asia have not been signed or ratified by any NWSs. All NWSs signed the African zone's protocol, but it has not been ratified by US; the US has not ratified the protocol of the Rarotonga treaty either. Major impediments to the provision of negative security guarantees by the NWSs include issues related to

⁴⁰ Under the terms of the CANWFZ Treaty, "stationing" is defined as implantation, emplacement, stockpiling, storage, installation and deployment of nuclear weapons. Nuclear weapons transit at sea is still permitted in most zones.

⁴¹ The United Nations provides only positive security assurances, i.e., the Security Council has pledged to provide immediate assistance to a NNWS that is the victim of a threatened or actual act of aggression with nuclear weapons (Resolution 225, 19 June 1968).

freedom of the seas, transit rights, the presence of bases in the treaty area, and potential conflict with previous security arrangements (Mulas 2011).⁴² As argued elsewhere, NWSs appear to continue to prioritize their own short-term military considerations ahead of their broader long-term interests in preventing horizontal proliferation (Hamel-Green 2009, p. 364).

The existing NWFZs have instituted additional if varying nonproliferation mechanisms. For example, the Latin American zone included additional verification and safeguards measures and created a specialized ad hoc agency to assure effective compliance with the commitments made by the parties to the Tlatelolco Treaty.⁴³ Unlike the NPT, the CANWFZ requests that member states adopt the more rigorous IAEA Additional Protocol safeguards, which allow for inspections at undeclared facilities, in order to ensure maximum transparency in the exclusively peaceful use of nuclear activities. The treaties of Rarotonga and Bangkok complement IAEA safeguards by requiring the exchange of reports and information. The establishment of these requirements contributes significantly to increasing cooperation and confidence, fostering the credibility of the nonproliferation commitments undertaken by all the states of the region. Additional attention is also paid to nuclear safety and security in the African NWFZ, where Article 10 of the Treaty of Pelindaba calls "for the highest standards" of security and effective physical protection of nuclear materials, facilities and equipment. In Central Asia, the parties to the treaty agree to take steps to prevent unauthorized use, handling, and theft of nuclear material and technologies (Article 9).

The treaties also promote extensive cooperation among member countries with respect to addressing environmental issues related to nuclear material and activities. Once a major testing site, the South Pacific NWFZ is particularly committed to protecting the region's natural resources and its people from environmental pollution caused by radioactive substances. To that aim, the Rarotonga Treaty explicitly prohibits the possession and testing of nuclear explosive devices, even for peaceful purposes, and

⁴² The United States has not ratified the Rarotonga protocols because it refuses to accept any limitations on the right of passage of nuclear-powered or naval vessels transporting nuclear weapons in the region. None of the NWSs has signed the protocols of the Southeast Asia NWFZ due to concerns over the inclusion in the zone of continental shelves and exclusive economic zones and presumed inconsistencies with the UN Convention on the Law of the Sea. In addition, the United States is concerned about the limitations on port calls by ships carrying nuclear weapons. Again, the United States has signed but not ratified the negative security assurance protocol of the Pelindaba Treaty, due to a reservation it maintains from the time Libya was pursuing a clandestine WMD program. Particularly problematic is the case of CANWFZ, due to the lack of support, if not open opposition, expressed by France, the UK and above all the United States as to the presumed inconsistency between the treaty's obligations for the total ban of nuclear weapons and the possible deployment of Russian nuclear weapons in the region under the terms of the 1992 Tashkent Treaty.

⁴³ This organization is the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL). Two other supporting institutions not within the NPT framework are the Commission for the Southeast Asia Nuclear Weapon-Free Zone and the African Commission on Nuclear Energy (AFCONE); the latter was established in November 2010.

contains a ban on the dumping of radioactive waste and other radioactive materials at sea anywhere within the South Pacific zone.

The two most recently established NWFZs, those in Africa and Central Asia, explicitly prohibit nuclear weapons research and nuclear explosive devices. Furthermore, each party in the Treaty of Pelindaba agrees not to take, assist, or encourage any action aimed at an armed attack by conventional or other means against nuclear installations in the region (Article 11).

FROM NWFZ TO WMDFZ

Among the many challenges facing the proposal to establish a WMD-free zone in the Middle East is the fact that there are no actual examples to emulate. Existing regional treaties deal only with nuclear weapons, while other categories of weapons of mass destruction (i.e. chemical and biological weapons and their delivery systems) are technically out of the scope of the establishing treaties.

The current proposal for a WMD-free zone in the Middle East originated from the traditional concept of a nuclear weapons-free zone in the region; Iran and Egypt proposed the idea in 1974 in a resolution to the UN General Assembly. The initial proposal was eventually expanded to include all categories of WMDs, in addition to nuclear weapons. In 1990, Egyptian president Hosni Mubarak initiated the shift of focus, acknowledging the threat posed by the presence of chemical and biological weapons in the region. Covering the various categories of WMD in the proposal was also considered indispensable to attract the support of Israel and the United States. The reason for linking bans on chemical and biological weapons with a ban on nuclear weapons was to encourage positive trade-offs in a WMD disarmament process. Syrian President Bashar al-Assad, for example, in an interview with the Daily Telegraph in 2004 openly stated that the country's chemical and biological capabilities would be eliminated only if Israel were to give up its nuclear arsenal (Brogan 2004). Israel has often hinted at the need to keep a WMD force to deter the non-conventional capabilities of its Arab neighbors and of Iran.

The expansion of the proposal's content, however, inevitably adds further complications, especially in designing and implementing effective verification mechanisms, due to the almost indistinguishable "dual-use" nature of chemical and especially biological materials and equipment.⁴⁴ Nevertheless, the NWFZ concept and the concrete experience of the existing nuclear free-zones remain very relevant to the proposed WMDFZ in the Middle East, offering a starting point for insights on how to overcome obstacles to moving the Middle East proposal forward.

⁴⁴ In addition, the production of biological and toxic agents require only small-scale facilities that are easy to conceal. It is no accident that the Biological and Toxin Weapons Convention (BTWC) in force since 1975 does not have any verification scheme

The added complexity of a WMD-free zone is not entirely novel. Each new NWFZ has emerged as more complex and comprehensive than the last, introducing innovations and creative legal arrangements (IAEA 2011b). This means that we have today more experience, expertise, and best practices on which to build toward the goal of creating a WMDFZ in the Middle East. The Pelindaba Treaty establishing the African NWFZ is particularly relevant for the Middle East since it not only includes a very broad and elaborated set of prohibitions but it is also the only one that includes a former *de facto* nuclear armed-state, South Africa, and addressed the concern that all facilities and nuclear explosive devices would be identified and dismantled (Miller and Scheinman 2007, pp. 147-48).

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