EU Non-Proliferation Consortium

The European network of independent non-proliferation think tanks

EU Non-Proliferation Consortium Second Seminar to Promote Confidence Building and in Support of a Process Aimed at Establishing a Zone Free of WMD and Means of Delivery in the Middle East

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Seminar Reader

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About the EU Non-Proliferation Consortium

A European network

In July 2010 the Council of the European Union decided to create a network bringing together foreign policy institutions and research centres from across the EU to encourage political and security-related dialogue and the long-term discussion of measures to combat the proliferation of weapons of mass destruction (WMD) and their delivery systems.

Structure

The EU Non-Proliferation Consortium is managed jointly by four institutes entrusted with the project, in close cooperation with the representative of the High Representative of the Union for Foreign Affairs and Security Policy. The four institutes are the Fondation pour la Recherche Stratégique (FRS) in Paris, the Peace Research Institute in Frankfurt (PRIF), the International Institute for Strategic Studies (IISS) in London, and Stockholm International Peace Research Institute (SIPRI). The Consortium began its work in January 2011 and forms the core of a wider network of European non-proliferation think tanks and research centres which will be closely associated with the activities of the Consortium.

Mission

The main aim of the network of independent non-proliferation think tanks is to encourage discussion of measures to combat the proliferation of weapons of mass destruction and their delivery systems within civil society, particularly among experts, researchers and academics.

http://www.nonproliferation.eu

Disclaimer

The booklet at hand contains different proposals on how to move forward in a process aimed at establishing a weapons of mass destruction-free zone in the Middle East.

The policy papers were drafted in the run-up of an EU-sponsored seminar, which is to be held in Brussels on 5 and 6 November, 2012.

The seminar was organized by the EU Non-Proliferation Consortium, which is a joint venture of independent European think tanks working in the fields of non-proliferation and disarmament, established by a decision of the European Council on 26 July 2010. The Consortium was also entrusted with the editing of the policy papers.

The papers were written by experts coming both from the Middle East as well as from other regions. Most authors had an active role in the seminar.

The editors emphasize that all proposals and recommendations contained in this booklet reflect the personal view of the authors only and cannot be attributed to any state or group of states, or to the EU Non-Proliferation Consortium.

Frankfurt, November 2nd 2012

Prof. Dr. Harald Müller, Vice-President of the EU Non-Proliferation Consortium

EU Non-Proliferation Consortium Second Seminar to Promote Confidence Building and in Support of a Process Aimed at Establishing a Zone Free of WMD and Means of Delivery in the Middle East

The Regional Security Environment and Basic Principles for the Relations of the Members of the Zone

NABIL FAHMY[*]

Introduction

The 1995 Review and Extension Conference on the NPT was able to adopt its decision to indefinitely extend the treaty without a vote only because it also adopted a parallel resolution on the Middle East region calling for, inter alia, "the adoption of practical measures towards the creation of a Nuclear Weapons and Weapons of Mass Destruction Free Zone (NW/WMDFZ)." Consequently, one should not forget or ignore the salience of this resolution, which was sponsored by the three depositaries of the NPT: The United States, Russia, and the United Kingdom. Equally significant is that the Middle East was the only region in the world on which a resolution was adopted, which was testimony to the concern of the NPT state parties over nuclear proliferation developments in the region.

None of this is coincidental. The issue of non-proliferation of nuclear weapons has been a topic of great consequence in the Middle East since the 1950s. Several countries, including Egypt, Israel and Iran, have unilaterally planned or have run nuclear weapons programs. When the Nuclear Non-proliferation Treaty (NPT) was opened for signature in 1968, Israel declined to sign the treaty and Egypt signed but conditioned its ratification upon Israel's full adherence to the treaty. Several other Arab countries did the same. Over the years, every state in the Middle East, except for Israel, ratified its adherence to the NPT but, nevertheless, concerns over nuclear non-proliferation and nuclear weapons in the Middle East remain paramount. Reports have emerged in the past about the non-compliance of Iraq and Iran to their non-proliferation obligations and of a rather bizarre attempt at producing weapons of mass destruction in Libya, over and above what may or may not have happened in Syria. While, in addition, it appears that Israel has continued to expand its nuclear weapons arsenal despite Egypt and Jordan signing a peace agreement with Israel, as well as the destruction of Iraq's military infrastructure, both of which have negated any serious potential for a full-fledged Arab–Israeli war or existential threat. Israel, the country reported to have the largest nuclear arsenal in the region, still remains outside the NPT. Over the last few decades, while the number of adherents to the NPT has increased in the Middle East, the tensions caused by military asymmetries and regional conflicts have placed the commitments made by NPT members to their treaty obligations under considerable stress. This is particularly true given

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that the security concerns of Middle Eastern NPT parties have not been adequately addressed in the nuclear domain.

The proposal to free the Middle East from nuclear weapons was first introduced by Iran and Egypt at the 1974 United Nations General Assembly. Thirty-eight years have passed since the adoption of that proposal, which has frequently received the unanimous support of the international community, irrespective of some less than nuanced caveats about when it could enter into force. This foundational proposal was complemented but not replaced by another Egyptian proposal in 1990: to create a Weapons of Mass Destruction Free Zone in the Middle East (MEWMDFZ). The longevity of these proposals indicates, I believe, that the international community overwhelmingly supports their objectives and is seriously concerned about the deterioration of non-proliferation efforts in the Middle East. The 2010 NPT Review Conference decision, which called upon the three depositaries and the Secretary-General of the United Nations to convene a conference by 2012 to discuss implementation of its 1995 resolution, constitutes a call for action if we, as a community, are truly interested in safeguarding the Middle East and the international community from the dangers of the proliferation of these weapons in the region. It also presents a valuable opportunity to address these core challenges to Middle Eastern security. Further procrastination in dealing with these issues will bring into question the credibility of the NPT itself.

It is rather ironic that, today, some argue for a delay in the process because of the political transformations occurring, most notably in the Arab Middle East. Many of the same protagonists of this opinion have, at one point, argued that they could not deal with this issue as long as existential threats existed – threats that were removed by the Egyptian and Jordanian peace agreements with Israel – or the existence of authoritarian regimes, which raised questions about the commitment of the peoples of the region to these international obligations. Yet now, they continue to object to even the beginning of a process that, while urgent, will most likely conclude well after stabilization of the domestic political situations in the Arab Middle East. Even if that is not the case, the example of the Tlateloco Treaty in Latin America, which was negotiated between states of different degrees of democratic development and which entered into force gradually as members of the region found it in their interests to do so, clearly demonstrates that a diplomatic path towards nuclear non-proliferation exists, despite domestic uncertainties.

For all these reasons and many more, I see no merit whatsoever in postponing further the commencement of a process of negotiations to free the Middle East from nuclear weapons and other weapons of mass destruction. Ultimately, states in the region, based on their appraisal of the political and security environment, will have to agree on the Entry into Force clauses when and if they decide to join the proposed treaty. Needless to say, however, these decisions will not even be considered if the actual content of the treaty has not been determined. This is yet another reason not to delay the commencement of a serious process of negotiations or, in fact, to disrupt it at any point due to changing political circumstances. In fact, the negotiating process itself is a vital confidence-building measure between states in the region. And I strongly caution that not embarking on it would, in fact, have negative ramifications on any attempt to generate confidence between the regional parties

In light of the above, I will focus on what principles should serve as guidelines for states in the region now and, when the zone is established, on what the upcoming 2012 NPT Review conference on creating a MENWFZ should conclude with, and will furthermore suggest different kinds of confidence-building measures that can be adopted by states in the region before, during, and after said conference.

Principles and Parameters

The question of principle and moral responsibility is one that often seems secondary in the fraught realpolitik of international relations. It is empty rhetoric, put there only to cushion the harder practicalities of negotiated compromise. However, the moral principle of an international agreement must, in fact, be its defining characteristic. If any security agreement aspires to lasting success, it must hold states to a clear ideal and it must ensure that the states themselves fully and honestly subscribe to that ideal. In the context of the Middle East and the creation of a NWFZ there, such adherence to a clear set of principles regarding arms control and collective security is doubly important to the project's success. Any state that is party to a NWFZ must take to heart the mandate to "maintain international peace and security" through "effective collective measures" enumerated in the first article of the UN Charter.[1] Similarly, all presumptive states should unwaveringly commit themselves to refrain from the acquisition, transfer, and use of nuclear weapons enshrined in the first article of the NPT. No nuclear weapons-free zone, or a zone restricting weapons of mass destruction, can function on a basis falling short of this fundamental commitment.

Today, the international community focuses most on Iran's suspect nuclear program, while the noncompliance of countries such as Iraq, Libya, and Syria with international arms control regimes has been similarly emphasized over the last few decades. Such noncompliance with treaty obligations cannot and should not be accepted. However, we must not forget the burden placed on any regional arms control effort by Israel's alleged nuclear arsenal, its refusal to submit to the NPT, and its insistence on quantitative and qualitative military superiority over its neighbours. In any non-proliferation agreement, whether it be the NPT, the Chemical Weapons Convention (CWC), the Biological Weapons Convention (BWC), etc. the clear objective is to prohibit and prevent use and acquisition of these weapons. If a country wants to be a part of the international community, then it must take action towards these provisions, even if it is not a member state of one or all of the agreements. In other words, we cannot hope to achieve any WMD-free zone in the Middle East if one or more of the vital partners are in moral or actual violation of the already existing concepts and principles that guide non-proliferation and arms control and today constitute basic international norms in this region.

Consequently, the basic set of foundational commitments for the negotiating process towards the creation of a MENWFZ or a MEWMDFZ should, *inter alia*, include, first, a commitment to the pursuit of security through collective security measures and, second, a commitment to equal security for all states of the region. Through these commitments, the states should be tacitly agreeing to the overarching objectives of a conference: increased security for the nations of the region and the assumption that security can only be achieved through peaceful relations, dialogue, and political arrangements; the logic of discarding the current imbalance for the establishment of a qualitative and quantitative balance between the military capabilities of regional players; and the conclusion of agreements on arms reduction and disarmament with effective monitoring measures enshrining equal rights and responsibilities between all party nations is imperative.

The long-term objectives suggested here must also be accompanied by the recognition of a set of short-term priority objectives. These are the banishment of all weapons of mass destruction from the Middle East, the prevention of an intensive arms race in the region, and

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[1] The UN Charter, Chapter 1, Article 1, http://www.un.org/en/documents/charter/chapter1.shtml

achieving a high degree of military transparency in all weapons systems, particularly those utilizing advanced or devastating technologies.

Furthermore, for the negotiating process itself to have any potential for success, the parties should openly commit, a priori, as part of a NWFZ or WMDFZ to promise, at minimum, to:

1) The renouncement of the acquisition, transfer, and use of nuclear weapons and other weapons of mass destruction
2) Ensuring that the regional and provisional agreements would be consistent with the relevant international disarmament agreements, but complementing them when necessary.
3) Ensuring that the arrangements for ridding the region of these weapons would be achieved with the agreement of the respective states of the region.

2012 Objectives of the Conference

With this in mind, the first objective of the 2012 NPT Review Conference should be to produce an unequivocal declaration in support of a MENWFZ without caveats or condition. The second objective should be to bolster rhetoric with the commencement of a negotiation process that is completely inclusive and leaves nothing that is directly relevant off the table, in terms of either topics or members. The conference, however, should remain focused on nuclear weapons for two reasons. The nuclear issue is the most pertinent and divisive topic in regional arms control, one which presents an urgent, and potentially devastating, threat to Middle Eastern security as a whole. Progress on a MENWFZ should, as a logical consequence, kick-start negotiating processes on the further regulation of chemical, biological, and other weapons of mass destruction. Many of the issues that stymie progress on these weapons touch on the same grievances that have blocked progress on a MENWFZ for nearly fifty years – for example, Egypt refuses to ratify the CWC until Israel ratifies the NPT – and, if those issues can be addressed by the nuclear process, then that should stimulate progress on the WMD front. It has also been argued that, since conventional weapons constitute the bulk of the weapons systems available in the Middle East, they should be dealt with first. However, it is for that very reason that it is unreasonable to expect any progress in the arms limitation process if conventional weapons are given priority because, as long as the Arab–Israeli conflict remains unresolved, neither side is likely to consider real change in such arsenals. Weapons of mass destruction on the other hand, especially nuclear weapons, pose a direct and imminent threat to regional security. For that reason, they must be our immediate concern at the upcoming conference.

Scope of Prohibition, Geographic Scope, a Verification System, the Relationship with International Systems

The conference should create something of a roadmap for the nuclear zone, and lay the groundwork for the requisite WMD treaties and arrangements. There are six questions in particular regarding which the conference will need to provide some clarity or create a process for clarity to be worked out afterwards. They can be best addressed through the establishment of parallel negotiating working groups to commence at, or immediately after, the 2012 conference.

First, clear guidelines for the scope of prohibition within the zone should be set. For instance, some suggest that the NWFZ should include prohibitions against peaceful nuclear testing, others do not. Another question is whether the treaty will cover research and development work related to nuclear weapons and whether certain portions of the fuel cycle will be prevented. A third question will relate to the issue of nuclear weapons in transit. Discussion on these basic components of the proposed zone will be needed to achieve progress in larger negotiations. Part and parcel of the scope of prohibition will be the question of geographic scope, namely, the geographical parameters of the zone. This will have both a regional and also an international effect and the United States and Russia in particular will be monitoring these definitions carefully. A fourth question of great importance will be the identity and scope of the verification regime encapsulated within the treaty. The Arab states and Iran have traditionally favoured oversight by the IAEA and an international safeguard system, which would require more diligence than the IAEA's traditional mandate, even with the additional protocols, due to the nature of the Israeli nuclear programme and concerns about possible Iranian noncompliance. Israel also does not have faith in the IAEA's ability to effectively police compliance with the treaty and has posited the idea of separate bilateral verification procedures. The fifth question that will need to be addressed is the relationship of the proposed zone to international agreements and whether the zone will manifest as part of a commitment to international treaties or whether it will be a regional treaty between parties. Finally, a sixth question is whether to place all the obligations concerning the prohibition of different weapons of mass destruction under one umbrella or in stand-alone parallel agreements.

Confidence-building Measures and Entry into Force in the Negotiating Process That Should Emerge from the Conference

Beyond these considerations there are at least two further issues that will be under consideration. These are the complementary confidence-building measures (CBMs), which will be needed to pave the difficult road towards a final agreement, and when to initiate negotiations on the timing and implementation of entry-into-force agreements.

Confidence-building Measures (CBMs)

As we reaffirm the commitment to the establishment of a MENWFZ and a MEWMDFZ and establish approaches to bring this objective to fruition, there will no doubt be a legitimate call for confidence-building measures to be taken by the regional parties, and perhaps even the nuclear weapons states beyond the region. The objectives of these CBMs should be to give the process on which we are embarking some credibility after almost four decades of empty platitudes, and to give the respective parties confidence in the seriousness of their respective counterparts. In fact, CBMs would most likely serve both these objectives well. Here, the experiences of other regional NWFZs and the examples of the Conference of Security and Cooperation in Europe (CSCE) in Helsinki are informative, but it would be erroneous to ignore the fundamental differences that exist between these situations and that of the Middle East. The issues involved here concern existential matters and identity rather than ideology and, while confidence-building measures are traditionally the easiest part of negotiations, they are complicated by Israeli and Arab sensitivities in the Middle East. Israel

supports confidence building in principle but handles the measures cautiously lest they become a slippery slope towards nuclear disarmament, while the Arabs see CBMs as a process of Arab–Israeli political normalization, on which they refuse to embark until Arab–Israeli peace is achieved. Thus, the singular nature of the process we are pursuing, and the particular characteristics of the Middle East conflict, underline the necessity of unwavering political commitments on the part of regional nations focusing on the mandate of the 2012 conference and spelling out their desire to establish a Middle East region free of nuclear weapons and other weapons of mass destruction.

If there is a will, there is a way, even on CBMs, which can be progressive and incremental both in terms of form and content. In order for these CBMs to be successful in their purpose, we must pursue wide-ranging and ambitious initiatives at three different levels: voluntary political CBMs, legally binding CBMs, and technical CBMs. At the political level, CBMs, which would be of a general declaratory nature, should entail commitments that the states of the region are ready to be bound by the principles of arms control and reduction. For example, one such measure might be a set of declarations from the major arms-producing and arms-acquiring states – particularly the permanent members of the Security Council, as well as Israel, Iran, and the Arab states – that clearly and unconditionally endorse the creation of a WMDFZ or NWFZ in the Middle East but also commit them to not take any action that would impede progress toward that objective.

However, while constructive, such political declarations cannot hope to spur change in the absence of real binding commitments. For this reason, a set of concrete and legally binding CBMs would provide the foundation for progress on a real program of action. In this regard, the immediate and unilateral submission of all nuclear facilities in NPT state parties to the IAEA safeguards system and the conclusion of a full-scope safeguards agreement by states that have not yet done so. Similarly, for any state that has not yet joined the NPT, urgent accession and the conclusion of relevant safeguards agreements should be a priority. On the supply side, exporting states outside the region should make their supply of nuclear materials conditional on full-scope safeguards agreements. In conjunction with these political and legally binding measures, technical CBMs should also be envisaged. These measures could include regional data-related measures such as the provision of information on the nuclear activities of states in the region to the Director General of the IAEA, but measures could also ultimately be widened to include the area of bilateral operational and peace-keeping activities. Activities such as the establishment of operational arrangements relating to force and weapons deployment, addressing options such as demilitarized buffer zones, early warning stations, aerial reconnaissance missions, and military liaison committees could all be envisaged, though much further down the road and probably after the conclusion of an Arab–Israeli peace.

Measures such as these, actively and judiciously applied, provide a set of practical steps that offer the prospect of real-world progress to bolster rhetorical commitments in the aftermath of a successful conference. However, there are several caveats to the efficacy of confidence building that we must remember from previous efforts. First, operational measures were always contingent on the political will and consent of the directly concerned parties and these measures were developed through a detailed step-by-step process. Second, previous peace-keeping measures reflected, and were governed by, the political as well as military situation that prevailed on parties' borders and a third party was nearly always necessary in developing and applying these measures. Finally, communications between the regional parties were directly related to the progress achieved towards the political resolution

of the conflict between them. For all these reasons unilateral, voluntary, and binding CBMs should be our primary focus now.

Entry into Force

The last issue to be considered should be the issue of entry into force. Disagreement among parties is now largely political in nature regarding this issue, with a clearly wide range of positions among regional players. States such as Egypt believe a zone can be established even now, and that such a development would enhance security and limit the potential for damage if conflicts were to break out. Other Arab countries are supportive of establishing a zone quickly but are not ready to negotiate directly with Israel and prefer the creation of a zone through a multilateral, UN-based system. Israel has argued that a zone can be established only after both 'peace and reconciliation' have been achieved among the Middle Eastern parties through direct negotiations. Iran's position is not clear. Formally supportive of the creation of a MENWFZ, Iran now rarely reiterates its previous commitment to regional arrangements, focusing most of all on the importance of achieving the universality of the NPT.

Conclusion

In short, the road to a nuclear or weapons of mass destruction-free zone in the Middle East will be arduous and intense. However, it is not a hopeless task, nor is it an effort that we can afford to delay at this crucial juncture. Through honest dialogue and a deliberate process of negotiation with complementary confidence-building measures, the concept of a Middle East Nuclear and other Weapons of Mass Destruction-free Zone is one that can be realized. The 2012 NPT Review Conference remains our next good opportunity to make progress towards this objective. The minimum threshold for success of the conference should be the adoption of an unequivocal declaration of support for freeing the Middle East of nuclear and other weapons of mass destruction and their means of delivery, as well as the initiation of a structured negotiating process on the different issues related to the fulfilment of these objectives. At the same time, an encouraging additional step would be to couple all of this with a series of confidence-building measures related to nuclear weapons and other weapons of mass destruction.

Reflections on 'The Regional Security Environment and Basic Principles for the Relations of the Members of the Zone'

ARIEL (ELI) LEVITE[*]

Introduction

There are widely divergent views on most aspects associated with the operationalization of the concept of a Middle East Weapons of Mass Destruction-Free Zone (MEWMDFZ). Two issues in particular are pertinent to this paper. First, where geographically should the Zone begin and end, in fact defining who ought to be an integral part of the Zone? And second, how does the Zone evolve, namely whether the Zone materializes through extensive negotiations and comprehensive agreement between the future members of the Zone on its parameters and composition? Or does it 'automatically' come to life once all the core members of the Middle East Zone have all acceded to the NPT and for that matter the CWC and BWC as well? Furthermore, would its verification measures be predominantly sui generis or consist exclusively of the application of International Atomic Energy Agency (IAEA) Full Scope Safeguards and functionally equivalent arrangements of the Organization for the Prohibition of Chemical Weapons (OPCW)?

The scope of this paper hardly lends itself to an elaborate discussion of either issue. Yet without addressing them one is unable to offer any meaningful observations on the security environment or constructive thoughts on the basic principles that ought to govern the relations between the members of the Zone. Hence let me at the outset suggest brief answers to these two questions. The answers also provide the basis on which the remainder of the paper proceeds.

First, I assume that the core of the MEWMDFZ would stretch from the Atlantic Ocean in the west to Central Asia in the east, from the Southern Mediterranean in the north through North Africa in the south, thereby extending over the territory of all Arab states, Iran and Israel, but would also somehow cover parts of eastern Turkey. In some form it must also bring in other states adjacent to the region (especially in West Asia) in addition to engaging those out -of -region powers that have (or could have) a strong security presence in the region.

Second, I also assume that the Zone could realistically be negotiated, or even established, only through sui generis Middle East specific modalities, not in the least in the domain of verification. The prospects of creating such a Zone already are quite bleak, and would be further diminished were one to try mechanically creating one through parallel accession to the NPT and application of IAEA Full Scope Safeguards.

With these two assumptions in place let me turn to discuss the security environment in the region, then endeavour to draw some conclusions for the principles governing relations between members of the Zone.

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The Middle East Security Environment

Notwithstanding several occasional serious upheavals, the Middle East security scene had known roughly three decades of relative stability and consistency between the 1970s and the 1990s. More recently however it has been undergoing a fairly dramatic transformation, one whose outcome presently remains highly uncertain. A few current attributes of the regional situation are considerable volatility, weakening of state governance (including state control over its own territory), and a high degree of societal unrest and resectorialization (reassertion of traditional forms of people's loyalty, be they religious, ethnic or tribal, but all at the expense of national identities and in tension or conflict with it as well as the other sectors). Additionally, the region is witnessing diminished influence on regional events by the traditional major powers (or for that matter any major out -of -region powers). These tendencies tend to infuse existing and re-emerging conflicts with mythical qualities, often bordering on existential dimensions. Ominously added to the mix is the empowerment of non-state actors throughout the region, some assuming a near -state stature and capabilities (be they the Kurds in Iraq, Hezbollah in Lebanon; Hamas in Gaza, or several tribes in Libya) and massive trafficking (some carried out by 'mere' potent criminals or entrepreneurs) of humans, material, and ideas into and across the region. Especially troubling in this context is the inflow to and dissemination in the region of weapons, including to these very same non-state actors.

Old rivalries within the region (such as between Sunni and Shi'a Muslims) are on the ascendancy throughout the region, but with Muslim Brotherhood and especially Salafist movements on the rise in many key states, tensions with Christians and Jews are also growing. Some of the present conflicts are fuelled by territorial disputes over control of territory rich in natural resources (from oil and gas to water) and other sources of income (e.g. smuggling), while others have the hallmarks of more traditional elements of interstate rivalries and arms races, such as over the acquisition of missiles and rockets and especially nuclear weapons. Some conflicts occur between the state protagonists themselves, while others involve the use of proxies of all kinds. In some conflicts traditional means of warfare (aviation, armour, artillery…) are employed while other conflicts increasingly involve the deployment of far shadier, though potentially no less consequential, coercive tools (from special forces and UAVs to cyber warfare). But tragically some of the conflicts are increasingly reaching the point of being civil wars (as most tragically apparent now in Syria and Yemen but frighteningly perhaps brewing once again in Libya) and armed confrontations between states as well as between states and non-state actors (most evident in Lebanon, Gaza, and the Sinai Peninsula).

Finally, the role of the extra -regional players in the Middle East is also changing. US hegemony in the region (so paramount since the end of the Cold War) is on the decline, though its presence is quite significant. But other players, some traditional (e.g. Russia and Turkey, or France and the UK) now play a fairly significant if more ad hoc role (e.g. over the Syria, Libya and Iran crises respectively), while new powers, mainly from Asia (China, both North and South Korea, and even Pakistan), have increased saliency in the region and at times fairly significant influence on the course of events. In fact, in many important ways the Middle East is merging more and more closely with Asia, a development that has profound implications for security arrangements in the Middle East.

What it all boils down to is a quasi-anarchical Middle East characterized by fluidity, complexity, uncertainty, and anxiety. As a result, traditional paradigms for thinking about

security in the region based on states and interstate relations (e.g. deterrence and prevention, but also alliances, peace treaties and arms control agreements) seem less relevant, though not entirely without some merit. While novel concepts for doing so (such as the Responsibility to Protect) are still woefully inadequate and forcefully resisted by those in the region and even more so outside it, they are wedded to the principles of non-intervention in internal affairs. Equally worrisome is the growing challenge to the legitimacy and efficacy of those few international bodies (such as the UN Security Council and the IAEA) that could provide the basis for effective action addressing the multiple security crises in the region.

Basic Principles for the Relations of the Members of the Zone

The level of upheaval in the Middle East as well as its causes call for adopting an innovative approach towards security and stability building in the region. At its centre must lie the recognition that states and interstate relations presently provide no more than a shaky basis on which to promote regional security and stability. The challenge in front of us is to think creatively about a new paradigm for security building that harnesses states and interstate relations wherever possible, yet also recognizes their profound weaknesses and limitations. Such a paradigm ought to acknowledge these shortcomings of the state system and contemplate novel approaches towards mitigating them. The magnitude of the challenge this reality confronts us with is truly humbling. Hence the few principles offered below ought to be regarded as no more than a modest initial contribution to the debate that will inevitably ensue in the years to come on the desirable parameters of such the prospective paradigm.

The first principle put forward is to focus on the relations between the core Middle East parties as the cornerstone of any MEWMDFZ arrangement. Creation of a Zone is an inherently regional affair although external assistance might help facilitate its evolution and implementation. The Zone must emerge from the region and be the creation of the regional states working in partnership. Under no circumstances can it be imposed on the region from the outside notwithstanding the interest of extra -regional parties to promote it. Moreover, a Zone will have to involve the establishment of pertinent regional institutions to implement it and the backbone of the Zone's verification scheme and ultimately also its enforcement mechanism must be regional in nature. This holds true even when pertinent international institutions exist (such as the IAEA and to a lesser extent also the OPCW) and even if they and certainly the UNSC might ultimately be called upon to reinforce the regional arrangements. Those parties eager to promote a WMDFZ are well advised to internalize this requirement and take the lead in fostering relations between the core regional parties in order to inspire them to join forces towards the creation of a Zone or at a minimum lessen their resistance to it. The logical extension of this principle is that the NPT framework (being exclusively nuclear, global in nature, and unable to represent some of the Middle East parties) is anything but conducive to the promotion of an MEWMDFZ. It will thus have to be directly superseded forthwith by a genuine regional platform for future discussions if the Zone is to prove meaningful.

The second principle is the centrality of the link between the domestic and the interstate dimension of the Middle East order. Relations between the Middle East parties cannot be restricted to diplomatic, let alone secret, dialogue between their formal emissaries. The

experience of the ACRS will prove useful in this regard. Real, imagined, and perhaps even contrived fear of the public reaction to any signs of normalization among the parties in the context of the Working Group had produced procedural ground rules that kept the process largely out of the public eye. This low profile seemed initially conducive to progress but before long came back to haunt its participants. At the time, many Arab participants had felt inhibited from taking any concrete or even symbolic steps of regional cooperation for fear that these might become public. They manifested a concern that such publicity would trigger an outcry and exacerbate an already fragile domestic scene precisely because many of these regimes suffered from deficient public legitimacy. Yet without adequate public support an elite-driven process could not be sustained even in cases where the non-democratic regimes in the region were the norm.

Now that the Arab awakening has largely transformed the region, public support has become an even more critical requirement for any real progress towards the establishment of a Zone. But it may have also become somewhat easier to attain precisely because the new participatory political process endows the governments (such as those that have emerged in Egypt and Tunisia) with a higher intrinsic legitimacy than their autocratic predecessors. The ground is therefore riper for an active public diplomacy effort to build public support across the region for a cooperative Middle East security process that over time can evolve into a MEWMDFZ. In fact the willingness of regional parties to engage in such practice would be very reassuring to the others and could in fact serve as a powerful indicator of whether they are genuinely interested in facilitating the promotion of a MEWMDFZ and vice versa.

A key challenge in pursuing this principle is to bridge differences between the regimes in the region, and especially to overcome the inhibitions of the less -than -democratic ones whose decision to pursue openness and regional collaboration is tantamount to undermining their own prospects of survival. Naturally anxieties about such prospects, already running high in the Middle East as a result of their reading of the outcome of the CSCE process, have skyrocketed following the 2009 Iranian protests and the more recent Arab Spring. A potential remedy thus lies in emulating as far as possible the Asian regional security model that is functionally equivalent yet rightly far less associated in people's minds with bringing down non-democratic regimes though perfectly consistent with such evolution.

The third principle is the development of an inclusive culture of tolerance and acceptance of others, as large as these differences may be, at the very least among the core Zonal parties. Once again such culture is as essential to the longer term domestic stability of the Zone's parties as it is to regional stability. And the two are inextricably linked. Arresting and gradually rolling back the deeply ingrained and highly toxic zero sum mentality currently re-emerging with vigour throughout the region has to be a top priority for anyone wishing to foster a political and social climate conducive to negotiation of a MEWMDFZ. Key attributes of such culture must at minimum include mutual recognition, peaceful co-existence, and rejection of the use of force for the settlement of disputes within and between the key regional players.

Importantly, in order to have the desired effect and also to inspire confidence in others, this culture of tolerance has to be actively and visibly cultivated by the parties' governments and systematically embedded not only in their public discourse (domestic as well as international) but also in their educational systems. It must explicitly prohibit the dissemination of hatred and incitement to violence. Monitoring and reporting on such efforts, even comparing notes on experiences and best practices in this domain (and inevitably on striking a balance

between freedom of speech and its abuse) is bound to be contentious yet ultimately highly beneficial for fostering a climate of confidence and mutual trust indispensable for the construction of any cooperative security architecture in the region and most certainly for a MEWMDFZ.

The fourth principle is to endeavour early on to work out a consensus among the regional participants around a formal set of guiding principles for both the process and the relations between the parties to the Zone. These guidelines should have one primary aim: to enhance the confidence of the regional participants in the process in their ability to protect their core interests while engaging in an unprecedentedly ambitious exercise of cooperative security building. Even more importantly, such guidelines should inspire the participants to conduct themselves and treat their prospective parties to the Zone in a manner conducive to overcoming barriers of hatred, rivalry, and anxiety, deep suspicion and distrust, thereby enhancing the prospects for progress towards the creation of a MEWMDFZ. Both documents may draw on process ground rules originally developed elsewhere in the context of other multilateral security building processes in Latin America, Asia and Europe (as well as the former ACRS Working Group). But they would require some adaptation both to fit the particular circumstances of the region and to give regional participants a sense of ownership of these principles. Marked progress towards cooperative development of drafts of these documents (potentially led by a capable neutral extra -regional player in consultation with regional parties) could precede the launching of the formal negotiation process on the Zone and help facilitate it.

Obviously some of the concepts that ought to go into the substantive document are those already mentioned in the context of the third principle above (inspired of course by the Helsinki Final Act). But the present state of affairs in the region puts a premium on going beyond them to encompass additional principles or at least a modern -day version of them as well. Most prominent is an adaptation of the Helsinki principle of the inviolability of boundaries and frontiers. Factoring in regional realities at the current juncture seems important to try to expand on this principle. The desired direction ought to be to explicitly anchor the right of hot pursuit and preventive defence action when these boundaries or frontiers are violated or encroached upon and the state that is their custodian proves unable or unwilling to safeguard its own borders.

The fifth principle emphasizes realism and calibration of expectations. The upheaval in the Middle East is running so high at present that it is not only unrealistic but, worse, highly counterproductive, to expect and demand rapid progress any time soon towards the construction of an MEWMDFZ . It is such an ambitious regional security architecture to entertain even in the best of times that it is no surprise that it has never been implemented anywhere in the world. For a Zone to stand any chance of success it cannot emerge as an artificial creation utterly divorced from regional realties. It has to evolve as an extension of the peaceful transformation of the region. And as such it is bound to be the final step in (and the outgrowth of) a long and difficult process of cooperative security architecture building rather than a catalyst for such transformation. Thus the combination of an ill-timed push to develop the Zone removed from the context with the regional realities and the setting of unrealistic expectations for rapid progress towards its creation are bound to undermine further the already modest prospects for the creation of such a Zone. Worse still, they are bound to

further sour relations between the Zone's prospective parties. Such a lofty vision must be pursued pragmatically to draw in rather than scare off all its key future participants.

A particular challenge in this area is how to handle at the outset of the process existing WMD arsenals or capabilities in the region. Should these be confronted head on right away aiming to expose them, shackle them, and begin their elimination? Or could a less direct approach prove more conducive to attaining the long term result? Obviously the immediate symbolic benefits of the first approach, if it could be successfully implemented, are considerable. Yet I consider such a prospect highly unlikely and the effort committed to achieving it undesirable precisely because it is bound to raise unrealistic expectations. The frustration that will inevitably ensue is likely to induce disillusionment, resentment, and paralysis. Furthermore, notwithstanding their symbolic importance (or perhaps because of it), existing WMD arsenals do not presently constitute the greatest menace to the security of the region and lend themselves to more traditional remedies to deter their use. I thus submit that the early efforts to promote the idea of a Zone should instead focus 'merely' on preventing the current situation from getting any worse (through well-established non-proliferation measures) in tandem with other initiatives to improve the regional security climate. These, in turn, would be conducive to marginalizing WMD capabilities and curbing the enthusiasm for them, thereby serving the long term purpose of banishing and eventually eliminating them altogether.

The sixth and final principle is comprehensiveness, in terms of agenda as well as participation. Incidentally, both give ample reason to consider the NPT context utterly inhospitable for a MEWMDFZ undertaking. The comprehensive agenda must go well beyond the traditional discussion of nuclear weapons and other weapons of mass destruction, their delivery systems, and even the leading types of conventional arms. It must creatively bring in factors that are uppermost in people's minds as they think of their security situation but may be far less observable and quantifiable. For, after all, possession of WMD and the aspiration to develop or acquire them are often the reflection of innermost anxieties about security and stability (often framed in historical terms) rather than a direct result of any immediate and specific military challenge. Breaking that knot is likely to occur only if those anxieties are effectively put to rest first.

Comprehensiveness in terms of participation is presumably self-evident. Yet in the Middle East it has also become far more demanding than it has heretofore been because of two relatively recent developments: the growing role of adjacent (e.g. Turkey) and new extra - regional players in the Middle East scene (China, Pakistan and the DPRK immediately come to mind) and the emergence of powerful new non -state actors who not only wield considerable influence in one or another corner of the region but also across the region. Some may even be poised to take over the reins of government from those currently in power. How to engage these non-state players of the day is a far from trivial question and will inevitably face many obstacles. But unless somehow brought in, these forces are bound to be spoilers that could ultimately derail the process from the outside or undermine it if and when they succeed in gaining power.

Concluding thoughts

Judging by the standards of previous initiatives to establish a mere NWFZ in other regions, the negotiation and eventual establishment of a WMDFZ in the Middle East undoubtedly is an unprecedentedly ambitious undertaking. Worse still, it is presently contemplated under highly inauspicious regional circumstances for such an undertaking. It is reassuring to know that the formidable challenges involved do not breed despair but instead invite serious reflection and debate on the path ahead. This paper was intended to help stimulate this reflection on ways for making headway possible against all odds. It aims to do so by first identifying the security situation in the region and then outlining a handful of principles for developing the relations between the prospective members of the Zone. Struggling to produce viable policy precepts to move the MEWMDFZ process along, the paper first draws on pertinent historical experience in building cooperative regional security architecture in other regions, much of it being highly relevant but discouraging. It then discusses innovative policy ideas in the hope that by weaving together both sources of insight a viable course for moving ahead can be charted out.

Basic Principles for a Process Leading to the Establishment of a Middle East Free of Weapons of Mass Destruction

Harald Müller[*]

Peace process, regional security, arms control, zone free of weapons of mass destruction: A cobweb that cannot be disentangled

In the background paper which my associate Claudia Baumgart-Ochse and I wrote for the 2011 EU seminar on a zone free of weapons of mass destruction in the Middle East,[1] we developed a few practical steps which could be usefully considered in order to make progress on the path towards a nuclear weapons free zone. Each of these steps was conceptualized as a step forward which would not place too great a strain on prudent policies on either side: policies that would avoid taking too long and too risky a leap when smaller increments appear more advisable. We argued that even such steps would only be considered by parties in a favourable political context and touched on this context only briefly. This background paper strives to deliberate on the context more broadly, in the light of historical experiences and of the positions taken by the parties in the region themselves, individually or collectively, in the course of almost forty years.

The establishment of a zone in the Middle East free of weapons of mass destruction inevitably implies a nuclear-weapon-free zone, broader confidence-building measures in conventional forces, and a reliable process towards stable international peace and regional security in the area, all of which are intimately interlinked. They will not advance separately, but only if progress takes place simultaneously and good faith is shown on all three tracks. UNGA Res. 66/25 of 13 December 2011 aptly captures this relationship. It postulates that peace negotiations in the Middle East 'should be of a comprehensive nature and represent an appropriate framework for the peaceful settlement of contentious issues,' recognizes 'the importance of credible regional security, including the establishment of a mutually verifiable nuclear-weapon-free zone', and in its operative paragraph 4 'notes the importance of the ongoing bilateral Middle East peace negotiations and the activities of the multilateral Working Group on Arms Control and Regional Security (ACRS) in promoting mutual confidence and security in the Middle East, including the establishment of a nuclear weapon free zone'; this operative paragraph notably brings together peace negotiations, arms control and regional security, mutual confidence-building and the nuclear-weapon-free zone in a single sentence. Its wording emphasizes that these elements, even though they might be

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[1] Harald Müller and Claudia Baumgart-Ochse, *A Weapons of Mass Destruction-Free Zone in the Middle East: an Incremental Approach*. Background Paper EU Non-Proliferation Consortium, Brussels, (2011),
http://www.nonproliferation.eu/documents/backgroundpapers/muller.pdf.

pursued in different locations/at different venues and through different tracks, cannot be divorced from each other or shoehorned into artificial sequences. They must be pursued in the same rhythm, and progress in any one of them depends on progress in any other.

All tracks must be guided by the same spirit of cooperation and persistent efforts of good faith made towards the jointly defined goals. This spirit manifests itself in certain principles followed by all partners on their path towards disarmament and peace. There is a relevant precedent for this from which these sorts of détente-plus-disarmament processes are invited to learn, namely the periods of US–Soviet détente in which relaxation of political conflict, the settlement of open territorial issues and arms control, prominently nuclear arms control, progressed hand in hand. The following paragraphs discuss the principles on which this process was built.

Basic principles for an integrated process leading towards an MEWMDFZ

1972 was the breakthrough year in US–Soviet nuclear arms control. The two parties agreed on the ABM Treaty, which provided for a balance of forces over three decades and enabled the stepwise limitation of the nuclear arms race and the beginning of a significant process of nuclear reductions. Simultaneously, they signed the Interim Agreement, named SALT I, which for the first time put a ceiling on the build-up of offensive strategic weapons and was the first in the series of eight successive bilateral nuclear treaties of which 2010's NewStart has been, so far, the last. In1972 a third document was published: one which was of great interest and related to the other one but which attracted less attention despite its significance: The 'Basic Principles of Relations between the United States of America and the Union of Soviet Socialist Republics,' without which the arms control treaties would probably not have seen the light of day.

The document was amazingly crisp and direct. The principles listed establish a framework in which confidence can grow and arms control can move forward. I will quote the most salient parts of the document which probably apply to the Middle East. I will then show that each of them has some equivalent in positions found either in joint documents on the Middle East peace process or in national statements relating to this process.

The common objective: Averting the danger of war

Preambular para. 2 states the 'need to make every effort to remove the threat of war and to create conditions which promote the reduction of tensions in the world and the strengthening of universal security and international cooperation.' This is picked up in operative para. 1 where the parties express their ' common determination that in the nuclear age there is no alternative to conducting their mutual relations on the basis of peaceful coexistence.'

We have a clear correspondence here to related notions from the region. UNGA Res. 3263 (XXIX), of 9 Dec. 1974, the first one voted on by the UNGA at a time when Israel was not yet ready to agree, already says in preambular para. 7: 'Mindful of the political conditions particular to the region of the Middle East and of the potential danger emanating there from which would be further aggravated by the introduction of nuclear weapons in the area.'. In the same spirit, the 2002 peace plan of the Arab League expressed the 'conviction that a military solution to the conflict will not achieve peace or provide security for the parties.'. The 1972 principles identify the risk of war and ultimately nuclear war as a categorical

imperative to pursue both peace and nuclear disarmament. This is echoed in the other documents.

Recognition as equals and the justified claim to equal security

A second element in 1972 was mutual recognition as equals with legitimate security interests. 'Differences in ideology and in the social systems of the USA and the USSR,' the document states, 'are not obstacles to the bilateral development of normal relations based on the principles of sovereignty, equality, non-interference in internal affairs and mutual advantage'. As a result, 'discussions and negotiations on outstanding issues will be conducted in a spirit of reciprocity, mutual accommodation and mutual benefit.'

Recognition is a key issue in the conflict among the parties in the Middle East and one that casts a long shadow over the possibilities for making progress towards a zone free of weapons of mass destruction. In his opening speech at the 1991 Madrid Conference, Prime Minister Shamir of Israel called on his Arab interlocutors, 'Show us that you accept Israel's existence. Demonstrate your readiness to accept Israel as a permanent entity in the region.' I submit that the fact that there are still parties in the region which do not hear this call is a serious obstacle to making progress on all tracks towards a stable peace order, including, in particular, a zone free of weapons of mass destruction. Likewise, the preamble of the 1978 Camp David Accords confirms that 'peace requires respect for the sovereignty, territorial integrity and political independence of every state in the area and their right to live in peace within secure and recognized boundaries.' And in the Oslo Accord, the two parties 'recognize their mutual legitimate and political rights, and strive to live in peaceful coexistence and mutual dignity and security.' Certainly, mutual recognition as equals by all states in the region – the emerging state of Palestine included – is the sine qua non for everybody to embark seriously on a process that would lead to considerably lower levels of armaments and notably to laying down all weapons of mass destruction.

Equality and justice

Recognition implies equality. Being seen and treated as equal is one of the most fundamental elements of justice, and striving for justice is one of the most fundamental traits found in both individual and collective human behaviour. It is thus not surprising that the insistence on justice is ubiquitous in the Middle Eastern discourse on peace. Amr Moussa, then Egyptian Minister of Foreign Affairs, aptly summarized this at the Madrid Conference in 1991 when he called for '…genuine peace based on justice and dignity'… [to] 'achieve agreement on arrangements and methods that will secure justly and equitably the legitimate needs of all parties without infringing on the rights of any party' and demanded that 'Our march towards this must be reasoned and wise, aiming for justice and fairness. It must accommodate equal rights and obligations.'

The principle of justice, based on equal treatment, manifests itself in different specific elements for the different parties. It is essential to understand that the remarks by each of the parties explain true fundamentals that must be taken into account by the other side in order to move the whole process forward. On the Israeli side, the key is the unequivocal recognition and acceptance of its existence (see the abovementioned statement by Israel's former Prime Minister Shamir at the Madrid Conference). This demand was heeded in moving words in Chairman Arafat's Nobel Peace Prize acceptance speech in 1993: 'Peace ... enables the Arab

spirit to reflect through unrestrained human expression its profound understanding of the Jewish–European tragedy, just as it allows the tortured Jewish spirit to express its unfettered empathy for the suffering endured by the Palestinian people over their ruptured history. Only the tortured can understand those who have endured torture.' In addition, he pledged to recognize of Israel's 'Middle Eastern identity.' It is know that there are still other views (at play) in the region which differ from what Arafat said.

On the Arab side, there appear to be two grievances. The first one was explained by then Crown Prince, now King Abdullah of Saudi Arabia during the meeting of the Arab League in 2002: 'Peace and the retention of Arab territories are incompatible and impossible to reconcile or achieve.' The second one is manifest in any broad Arab discourse on the nuclear situation in the Middle East: nuclear inequality in the region, in the eyes of the Arabs, represents an injustice in terms of unequal status and unequal security that cannot be left unaddressed. Incidentally, this position was also reflected in the 1972 US and Soviet Basic Principles where operative paragraph 2 read: 'Both sides recognize that efforts to obtain unilateral advantage at the expense of the other, directly or indirectly, are inconsistent with these objectives. The prerequisites for maintaining and strengthening peaceful relations between the USA and the USSR are the recognition of the security interests of the Parties based on the principle of equality…'.

Proving recognition of equality by avoiding provocations

In the early phase of détente policy, the Soviet Union and the United States were well aware that their cooperation was still on shaky ground and vulnerable to mistakes or mishaps. Therefore, they agreed to attach 'major importance to preventing the development of situations capable of causing a dangerous exacerbation of their relations. Therefore, they will do their utmost to avoid military confrontations and to prevent the outbreak of nuclear war. They will always exercise restraint in their mutual relations, and will be prepared to negotiate and settle differences by peaceful means.'

The thrust of this principle is to avoid pushing against what the other side sees as vital interests. From the Israeli perspective these are actions which would corroborate its fear that the partners do not accept Israel's existence in the Middle East. Support by regional states for terrorism against Israel is usually interpreted by Israelis as a sign that such supporters aim to eliminate their state. The most powerful appeal which Prime Minister Shamir directed towards the Arab side in Madrid was 'coexistence instead of terrorism.' Continued support for terrorism by any regional state against another will thus act like a showstopper for the peace process including moves towards a zone free of weapons of mass destruction.

From the Arab vantage point, the extension of settlements in the West Bank is equivalent to the way the Israelis regard terrorism. Rather than posing a threat to existential security, it endangers existential justice and thus undermines the peace process for good. Likewise, the categorical refusal to explore possibilities of dealing with the nuclear issue with a view to moving stepwise towards a nuclear weapons free zone is taken as proof of the intention to maintain nuclear inequality in the region forever. Israel, in turn, finds it unacceptable that its own nuclear position is vigorously debated in the region while the suspicious nuclear activities of other parties (not to mention other weapons of mass destruction) results in less public protest, criticism and condemnation. Israel regards that as a provocative sign of unequal treatment.

Supporting terrorism, continuing occupation, and placing a taboo on the nuclear issue are thus, in one way or the other, true showstoppers for a sustainable peace process in which progress towards a zone free of weapons of mass destruction is an inextricable component.

Conclusion

This paper set out to explore the context in which positive steps towards a Middle East zone free of weapons of mass destruction could be successfully discussed. It arrived at a relatively small set of such principles, mainly derived from the US–Soviet template at the beginning of the first détente period, which was then interpreted in the light of the positions of regional parties. It should be emphasized that such principles only come to life when they are implemented, and that, in the absence of related practice, a positive process will not happen. It should also be understood that such principles do not present a menu from which to choose but a cobweb from which no element can be eliminated without destroying the whole fabric. A conference in 2012, to be attended by all the States of the Middle East, on the establishment of a Middle East zone free of nuclear weapons and all other weapons of mass destruction would be highly advisable, in addition to deliberations on more specific measures to move the objective enshrined in its title forward and to set aside time for consideration of the basic principles guiding the relations between parties in which these specific measures would be, and must be, embedded. It should also be noted that if parties were to choose to refuse to deliberate such basic principles, this would cast doubts on how seriously they take the objective of a zone free of nuclear weapons and all other weapons of mass destruction.

A Top Down Approach to a Nuclear Weapons Free Zones in the Middle East

PIERRE GOLDSCHMIDT*

Initiatives taken in favour of global nuclear disarmament deserve the full support of the international community. Key international actors generally accept that achieving a world without nuclear weapons, a desirable long-term goal, will require incremental steps over an extended period of time.

The creation of a Weapons of Mass Destruction Free Zone (WMDFZ) in the Middle East remains a fashionable topic of discussion when considering steps towards a world free of nuclear weapons. In fact, the Middle East remains the region of the world most frequently recommended for such a zone. However, the notable absence of favourable conditions for establishing a WMDFZ in the Middle East presents significant challenges.

Indeed, such as zone:

- has never been established among states at war, as is formally the case between Israel and Syria;
- has never been established between states that do not officially recognize each other as political entities and thus, share no diplomatic relations (as in the case of Israel); and
- has never been established by states non-compliant with safeguard agreements (like Iran and Syria) or with a state that has repeatedly threatened to withdraw from the NPT (as does Iran).

In addition, it is doubtful that the much praised[1] Treaty of Tlatelolco, which established a nuclear weapons free zone (NWFZ) in Latin America, could serve as an acceptable precedent for the Middle East. Two of the provisions of that Treaty, for instance, allow parties to "carry out explosions of nuclear devices for peaceful purposes, including explosions which involve devices similar to those used in nuclear weapons," and to withdraw from the treaty after 90 days-notice. It is hard to imagine such provisions to be acceptable in the Middle East.

The difficulty of establishing a WMDFZ in the Middle East forces the question of whether a focus on such a zone, in particular by states belonging to the Non-Aligned Movement (NAM) is just another illustration of the much-criticized double standard.[2] It also raises the question of why the NAM emphasizes the great importance of creating a WMDFZ in the Middle East while generally remaining silent about the lack of NPT membership, not to

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[1] In particular because its negative security assurances protocol is the only one which has been ratified (as early as 1979) by all NWS.

[2] Which includes advocating non-NPT states to dismantle their nuclear arsenals before the five nuclear-weapon-states do so, as they committed to do under the NPT more than 40 years ago.

mention possession and testing of nuclear weapons, of two of its own members: India and Pakistan?

In any case, the political circumstances that characterize the Middle East render a WMDFZ unlikely in the foreseeable future. Harald Müller last year stated this quite succinctly:

Given the state of conflict, violence and mutual distrust in the region, it is highly improbable that a WMDFZ can ever be established without a considerable change in the overall relationship between the states in the region that makes war between them highly unlikely.

To dispute the right of existence of a regional neighbour makes any process of disarmament a non-starter.

All states in the region must accept, explicitly and credibly, the existence of Israel and abstain from supporting terrorist acts against its territory. Israel must accept withdrawal, within some time frame, from the occupied territories in order to permit the Palestinians to live in a viable state of their own, with possible equitable and agreed territorial exchanges in the process.[3]

Müller argues that the key to a WMDFZ in the Middle East is a sufficient degree of security, so that states no longer need WMD. This observation necessitates consideration of the specific security prerequisites in order to establish a WMDFZ in the Middle East.

Is Turkey In?

First, one must determine which countries to include in a prospective WMD Free Zone. One approach is to follow the IAEA definition of the Middle East region, which includes the following 23 states: Algeria, Bahrain, Comoros, Djibouti, Egypt, Islamic Republic of Iran (Iran), Iraq, Israel, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya (Libya), Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen.[4]

However, if the IAEA includes states such as Mauritania and the Comoros in its definition of the Middle East, wouldn't it be logical to also include Turkey? I would suggest so.[5] A WMDFZ in the Middle East should include Turkey all the more so because of Turkish dedication to the idea of WMDFZ in the Middle East. Indeed, "in recent years, Ankara has

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[3] Harald Müller and Claudia Baumgart-Ochse, *A Weapons of Mass Destruction-Free Zone in the Middle East: an Incremental Approach*. Background Paper EU Non-Proliferation Consortium, Brussels, (2011),
http://www.nonproliferation.eu/documents/backgroundpapers/muller.pdf.
[4] IAEA GOV/2011/55, *Application of IAEA safeguards in the Middle East*, (2 September 2011).
Three states included in the Middle East region have ratified the Pelindaba Treaty: Algeria (1997), Libya (2005) and Mauritania (1998).
[5] It is noteworthy that in most papers written by Egyptian experts on the MEWMDFZ Turkey is never included in such a zone.

been advocating the implementation of a regional nuclear-weapon-free zone, which officials see as part of an overall strategy to decrease tensions in the region."[6]

However, if a WMDFZ in the Middle East does include Turkey, it would require the withdrawal of NATO's tactical nuclear weapons from Turkish territory. Under what conditions could one envisage such a withdrawal?

Sinan Ülgen argues that the removal of NATO tactical nuclear weapons from Turkey could only take place if all other non-nuclear-weapon-states (NNWS) in the European Union (EU) also agreed to the removal of such weapons stationed on their territory.[7] Ülgen asserts that Turkey would willingly remove nuclear weapons from its territory if NATO was operating in consensus. Ankara appears convinced that NATO can rely on conventional forces or American nuclear forces for deterrence in lieu of NATO nuclear weapons stationed on Turkish territory, he claims.

Nevertheless, Ülgen indicates that Turkey "quietly supports maintaining the weapons on its territory and expects other NATO countries to continue their tactical nuclear weapon stewardship as part of the Alliance's burden-sharing principle."

NATO members have discussed the possibility of removing nuclear weapons from Europe. However, no consensus exists for unilateral withdrawal and any reciprocal agreement with Russia remains unlikely in the near future.

Moreover, Turkey's likely hesitance to join a WMDFZ because of limited security assurances may prove to be a further obstacle to the development of such a zone in the Middle East. Not only would NATO have to withdraw nuclear weapons from Turkish territory but—if a WMDFZ in the Middle East requires the same negative security assurances that other nuclear-weapon-free zones require—NATO could only continue to offer nuclear guarantees to Turkey against threats arising from outside the zone. Only if a state within the zone violated its non-proliferation commitments or received assistance from a nuclear-weapon-state could NATO extend nuclear security assurances to Turkey under a WMDFZ.

Thus, if Turkey seriously considers joining a WMDFZ in the Middle East, NATO should define what kinds of credible non-nuclear extended security guarantees it can extend to Ankara. This process would seek to discourage Turkey from concluding that an independent nuclear capability would better assure its future security, which would be contradictory to the goals of a WMDFZ in the Middle East.

How to Assure Israel's Security?

Israel poses its own set of challenges, including for NATO. As with Turkey, NATO could also play a role in encouraging Israel to join a WMDFZ in the Middle East. Perhaps NATO could offer membership in the alliance in order to encourage Israel to join the NPT as a Non-Nuclear-Weapon State.

But there are myriad obstacles to an Israeli membership to NATO. Among them, NATO requires that all existing members of the alliance approve the admission of new members and it seems likely that Turkey would veto Israel's accession so long as relations between the two countries remain unfavourable.

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[6] Sinan Ülgen, *Turkey and the Bomb*, *Carnegie Nuclear Policy Paper*, (February 2012).
http://carnegieendowment.org/files/turkey_bomb.pdf
[7] *Turkey and the Bomb*, ibid.

More importantly, it is doubtful that Israel would seek to join NATO under the present geostrategic environment, if membership meant Israel must rely on the international community for assuring its national security and survival.

Aside from NATO, the current state of Israeli relations with Iran and Syria presents roadblocks to a WMDFZ in the Middle East. The credibility of a WMDFZ will rest on the establishment of a cross-inspections regime. Before one can hope to see Israeli inspectors in Iran and vice-versa, Iran would have to recognize the existence of Israel and the two countries would have to establish normal diplomatic relations. Also, Syria and Israel would have to conclude a peace treaty and end the formal state of war existing between the two nations.

All these obstacles do not necessarily mean that progress on a WMDFZ is not achievable, but they do argue for the indispensable need to move from grand visions and rhetorical declarations to concrete confidence-building measures. Without an effort to first establish a regional political and security order it is highly unlikely that the Middle East can effectively address arms control. International conferences alone are not sufficient to reach such a lofty goal.

Is Egypt Helping or Harming the Process?

Finland is scheduled to host this December a conference on establishing a WMDFZ in the Middle East. Tamim Khallaf, who works on disarmament affairs at the Egyptian Ministry of Foreign Affairs, recently wrote:[8]

> *The Finnish conference is a valuable opportunity that must not be squandered. A failure by the conference to produce a meaningful outcome could have unpredictable consequences.*

And he warns:

> *Attempts to undermine the 2012 conference or dilute its potential will unavoidably cast its shadow over the 2015 NPT Review Conference and its preparatory committee meetings, casting doubt about the prospects of success for the next Review Conference itself.*

One has to admit that the present situation and instability prevailing in the Middle East could not be a less favourable environment for discussing the establishment of a WMDFZ in that region.

Holding discussions on a WMDFZ in the Middle East at the present time might actually produce results counterproductive to the stated goal, especially if some states favour an all-or-nothing approach and reject limited steps to implement confidence-building measures among the parties. Such states could then easily claim frustration over the lack of progress and use this excuse as a pretext to further escalate tension in the region, rendering any hope of progress even more remote.

While states in the Middle East usually blame Israel for the current impasse on arms control, other states have assumed very unhelpful positions and should share the burden of

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[8] http://wmdjunction.com/120417_mideast_wmdfz.htm.

blame. For instance, Egypt, which has promoted the idea of a WMDFZ in the Middle East since 1974, has refused to sign the IAEA Additional Protocol and the Chemical Weapons Convention, and to ratify the Comprehensive Nuclear Test Ban Treaty, the African Nuclear Weapon-Free Zone (the Pelindaba Treaty), and the Biological and Toxin Weapons Convention, under the pretext of the non-universality of the NPT. Moreover, as indicated above, some officials in Egypt are already threatening to block progress on strengthening the non-proliferation regime at the 2015 NPT Review Conference if the December Conference fails "to produce a meaningful outcome." Of course, what might constitute a "meaningful outcome" remains an open question.

It is also worth noting the debate in Egypt about nuclear matters that raises some important questions about the policies of the new government in Cairo. At the NAM conference last August in Tehran, President Morsi renewed Egypt's long-standing call for a Nuclear Weapons Free Zone in the Middle East. However, some prominent Egyptian military and political actors evince different objectives. Since at least 2006 the Muslim Brotherhood, an organization in which Mr. Morsi served as a major leader before his election,[9] has called for Egypt to develop its own nuclear deterrent.[10] And in an interview that aired on Tahrir TV on August 6, 2012, a retired Egyptian army general, Abdul-Hamid Umran said: "Egypt should obtain nuclear weapons to deter Israel"[11] and few days later he repeated the sentiment, stating: "We should follow the Iranian model and deceive the international community."[12]

None of the above statements calling for nuclear weapons reflect the official position of Egypt; nonetheless, such comments deteriorate an atmosphere already unfavourable to progress on a WMDFZ in the Middle East.

A Top-Down Approach

As difficult as these security conditions for a MEWMDFZ are, the broader political prerequisites are probably equally as difficult in their own right. This list would include recognition of the State of Israel by Iran and some Arab States; the conclusion of a peace treaty between Israel and Syria; the creation of a Palestinian State; and Israeli accession to the NPT. This does not mean, however, that the international community cannot make progress toward a WMDFZ through steps to decrease tension in the region that can be achieved far more quickly.

Among such steps, the December Conference in Finland could focus on the establishment of a "nuclear-**test**-free zone" in the Middle East; and the development by the P5 of legally binding "negative security assurances" (NSA) to all states in the region that could be implemented promptly after the establishment of a WMDFZ.

This should be viewed as "top-down approach" to the establishment of a WMDFZ in the Middle East. This approach has the advantage of first implementing win-win measures for all states in the region, rather than pursuing a course that might single out one state, and thus,

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[9] See Raymond Stock, *Egypt. The Muslim Brotherhood Bomb?* (September 7, 2012).
http://www.gatestoneinstitute.org/3333/egypt-muslim-brotherhood-bomb.
[10] Ibrahim Said, Visiting Scholar at the Technical Nonproliferation and Disarmament Project of the UK/Norway initiative hosted by the Center for Accelerator-based research and Energy Physics, University of Oslo, *The bomb and the beard. The Egyptian MB's views toward WMD*, (June 11, 2012).
[11] http://www.memri.org/report/en/0/0/0/0/0/0/6633.htm.
[12] Egyptian army general (ret.) Abdul-Hamid Umran, interviewed by ON-TV (Egypt), (August 21, 2011).
http://www.memritv.org/clip/en/0/0/0/0/0/0/3098.htm.

have the potential to collapse and block progress. Establishing a "Nuclear-**Test**-Free Zone" (NTFZ) in the Middle East constitutes the most obvious top-down step in the direction of establishing a WMDFZ. The region can implement a NTFZ without waiting for a peace agreement between Israel and Syria, or for diplomatic relations to improve between Iran and Israel. An important first step would require that all Middle Eastern states—in particular Egypt, Iran, Israel, Saudi Arabia and Syria—ratify the CTBT in a coordinated way and within an agreed period of time.[13]

Although not inconceivable, it is unlikely to see Israel as well as other states in the Middle East join the CTBT as long as the United States has not ratified the treaty. The international community should therefore continue to strongly encourage the US to do so promptly.[14]

Avoiding nuclear weapons proliferation and thereby decreasing the risk of a nuclear weapons attack constitutes one of the main reasons for a non-nuclear-weapon state (NNWS) to join the NPT. It follows that NNWS will also seek legally binding "negative security assurances" from all NPT nuclear-weapon-states (NWS). As the Nuclear Threat Initiative notes:

> *Although the five NPT NWS have made various pledges regarding NSAs, each has been either non-binding, limited in scope, or qualified in some way. The NPT NNWS have consistently pushed for NSAs in the form of a free-standing treaty or a protocol to the NPT. The demand for such a commitment has increased in recent years, particularly from the Non-Aligned Movement. These States seek assurances that are legally binding, unconditional, and apply to all NPT NNWS.*[15]

Considering the difficulty of reaching an agreement on achieving such assurances in the framework of the Conference on Disarmament (CD), it is worth recalling that:

> *A 1999 UN Disarmament Commission report on establishing NWFZs noted that nuclear-weapon States should "...through the signing of relevant protocols, enter into binding legal commitments not to use or threaten to use nuclear weapons against the States that belong to the nuclear-weapon-free zone.*[16]

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[13] The ratification will likely be subject to some conditions in order to become operational. The first would be that the other states of the region have also completed their ratification process. Another condition might be that all states commit to accept the installation on their territory of measuring devices as deemed appropriate by the CTBTO.

[14] For example, the "Joint Ministerial Statement on the CTBT" released in New York on 27 September 2012 encouraged the United States to ratify the treaty.
   (http://www.ctbto.org/fileadmin/user_upload/statements/CTBT_Joint_Ministerial_Statement_27_September_2012.pdf.)
   UN Secretary General Ban Ki-moon has also said: "There is no good reason to avoid signing or ratifying this Treaty. Any country opposed to signing or ratifying it is simply failing to meet its responsibilities as a member of the international community." http://www.ctbto.org/press-centre/press-releases/2012/un-secretarygeneral-proud-of-15-years-of-successful-fight-against-nuclear-testing-urge-entry-into-force-of-the-ctbt/

[15] NTI, *Proposed Internationally Legally-Binding Negative Security Assurances*, http://www.nti.org/treatiesand-regimes/proposed-internationally-legally-binding-negative-security-assurances/

[16] Ibid.

These commitments can, however, take a long time to materialize. It took more than 10 years before Russia ratified the Protocols to the Tlatelolco Treaty (Latin America).[17] No NWS has yet signed the Protocols to the Bangkok Treaty (Southeast Asia) in force since 1997 and Semipalatinsk (Central Asia) in force since 2009. The United States has still not ratified the Protocols to the Treaty of Rarotonga (South Pacific) concluded in 1986 and the Treaty of Pelindaba (which was signed in 1996 and came into force in 2009).

However, on May 2, 2011, 15 years after the United States signed the protocols to the treaties of Rarotonga and Pelindaba, U.S. President Barack Obama submitted them to the Senate for ratification.[18] Despite support from the Obama administration, the protocols have languished in the Senate and their ratification prospects remain dim.

The April 2010 Nuclear Posture Review (NPR) states that the United States "will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Non-Proliferation Treaty and **in compliance with their nuclear non-proliferation obligations**"[19] (emphasis added). Apparently today this covers all NNWS in the world except two countries in the Middle East: Iran and Syria.

Since Negative Security Assurances constitute a primary motivation of states in the Middle East to create a WMDFZ, it is necessary that they are promptly guaranteed of such assurances as soon as a WMDFZ is established. Thus, the P5 could draft without delay negative-assurance protocols to the treaty and commit to sign them[20] and immediately start the ratification process as soon as the WMDFZ is in force in the Middle East without waiting for a global treaty on negative security assurances.

Conclusion

Achieving a WMDFZ in the Middle East is a noble and important goal on the road to attaining a world free of nuclear weapons. The international community should take every opportunity to get closer to that objective. In reality, both goals will take decades to achieve (President Obama said a world without nuclear weapons may not be achieved during his lifetime). If in the course of those years Iran or any other NNWS in the region develops a nuclear weapon or withdraws from the NPT, a WMDFZ in the Middle East will become even more elusive. It is therefore essential that the IAEA has the ability to confirm that all NNWS in the Middle East do not have undeclared nuclear material or activities. The IAEA must also have the authority to verify that NNWS declarations to the IAEA are correct and complete. It is also important that such conclusions are considered credible and reassuring by all states in the Middle East and by the international community. As is well known, the IAEA cannot draw such a conclusion for a state which has not ratified the Additional Protocol and doesn't

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[17] In May 1971 President Nixon endorsed the ratification of Protocol II to the Tlatelolco Treaty with the following qualification: "… the United States Government would have to consider that an armed attack by a Contracting Party, **in which it was assisted by a nuclear-weapon state**, would be incompatible with the Contracting Party's corresponding obligations under Article I of the Treaty" (emphasis added).
     http://www.armscontrol.org/documents/tlatelolco
[18] Gaukhar Mukhatzhanova and Miles Pomper, *Obama Seeks Senate OK for Protocols to Two Nuclear-Weapon-Free Zone Treaties*, (May 6, 2011) http://cns.miis.edu/stories/110506_obama_nwfz.htm .
[19] NPR Report, p. 46,.http://www.defense.gov/npr/docs/2010%20nuclear%20posture%20review%20report.pdf.
[20] The Vienna Convention on the Law of the Treaties compels the parties which have signed the Protocols not to act in a manner that would "defeat the object and purpose" of that instrument.

cooperate fully with the Agency in its implementation. Thus, it is essential that all Middle Eastern states do so.

Taking into account the current uncertainty about Egypt's future foreign and nuclear policies, the civil war in Syria, and Iran's progress towards a nuclear breakout capability, the timing for discussing the establishment of a WMDFZ in the Middle East could hardly be worse. If states use the lack of progress during those discussions as pretext to further undermine any attempt to improve the non-proliferation regime, the outcome will be worse than if such discussions in Finland had been postponed.

Notwithstanding the bleak geopolitical context currently prevailing, it is encouraging that an opinion poll made in Israel in December 2011 has indicated that more than 60% of Israeli citizens are favourable to the establishment of a NWFZ in the Middle East.[21]

It is therefore important to move in the direction of a WMDFZ by adopting confidence-building measures--such as creating first a Nuclear-Test-Free Zone in the Middle East and having the P5 commit to grant legally binding negative security assurances to states in the region. States can take these actions immediately regardless of the unstable political situation prevailing in the Middle East. And they should.[22]

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[21] http://www.cisionwire.com/university-of-maryland--college-park/r/israeli-public-supports-middle-eastnuclear-free-zone--umd-poll,c9195067 .

Assessing the Relevance of Nuclear CBMs to a WMD Arms Control Process in the Middle East today

EMILY B. LANDAU[*]

Introduction: Understanding the concept of confidence building and its role in an arms control process

A discussion of the possible relevance of nuclear confidence-building measures to a WMD arms control process in the Middle East today cannot proceed without first introducing conceptual clarity to the notion of CBMs and CSBMs, their role in international relations, and especially in an arms control dynamic.[1] Understanding the relevance of CSBMs to the proposal that is currently on the table critically depends on this clarification, and as such it will be the first order of business in the current analysis.

The roots of the CBM concept are firmly embedded in the European arms control experience of the 1970s, when CBMs were first codified as such in the Helsinki Final Act of 1975. These negotiations continued for years, and from the 1980s, the new generation of measures was denoted CSBMs, in order to emphasize their security dimension. Significantly, however, CBMs also played an important role in the bilateral US–Soviet nuclear arms control experience of the Cold War. Although not referred to as such at the time, the history of CBMs in this framework goes all the way back to the 1963 decision to create a 'hotline' between Washington and Moscow in order to improve real-time communication between the two superpowers, in the direct wake of the Cuban missile crisis. CSBMs also played a major role in the Middle East Arms Control and Regional Security (ACRS) working group that was active in the early 1990s, and they were the major focus of attention in the operational basket of these talks.

CBMs and CSBMs are formal, intentionally negotiated and consensually agreed-upon measures that can be part of a bilateral or multilateral arms control process. Their specific role is to provide a modest and non-threatening means of creating reassurance among states in this process. While one might theoretically envision unilateral (non-negotiated) steps that could be taken by states with an eye to bolstering reassurance and confidence, this is not how CBMs and CSBMs have traditionally come into play in arms control processes.

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[1] The basic principles are the same whether we are referring to confidence-building measures (CBMs) or to confidence- and security-building measures (CSBMs), as they were denoted in the latter stages of the European arms control experience as well as in the context of the Arms Control and Regional Security (ACRS) working group that was active in the Middle East in the early 1990s. The term CSBM was chosen in both Europe (1980s) and the Middle East in order to emphasize the special importance of addressing security concerns in the framework of arms control efforts.

When are CSBMs needed?

Confidence- and security-building measures have a role to play in situations in which states have identified a common interest in cooperating, but are unable to achieve this common interest because of the hostile and tense nature of their relationship. Put differently, these measures are designed to help states overcome the obstacle that their history of deep suspicion and mutual distrust has created in order to attain a mutually beneficial goal. In the context of current attempts to initiate a discussion of WMD arms control in the Middle East, the implicit working assumption seems to be that states have a common and equal interest in eliminating these dangerous weapons in order to lower the prospects for their use, and that their mutual suspicions and distrust are a major obstacle that precludes them from taking action in this regard. If this is indeed the case, the logic of CSBMs would be to build up a degree of mutual confidence and reassurance as far as the intentions that each state has towards the other, so that they would then be better positioned to realize their common interest in doing away with the weapons. I will come back to examine these assumptions after first defining CBMs/CSBMs.

What are the main features of CSBMs?

CSBMs are defined by their role and characteristics, and any idea that meets the criteria of this definition can qualify as a confidence-building measure. CSBMs are fundamentally about state *intentions*, rather than their capabilities per se. In line with the principle of reassurance and their non-threatening nature, CBMs and CSBMs will necessarily be modest in scope. While they should have some military and/or security relevance and significance, in order to fulfil their role as measures of reassurance, they cannot impinge on the *core* security interests and concerns of states, or be considered to entail risks for the parties involved. A critical feature of CBMs is that all parties feel that by adhering to the measures, their basic security is not being compromised or challenged, and that they indeed establish the basis for mutual reassurance.

An essential feature of CBMs is their win-win nature. These are measures that are designed to mitigate zero-sum situations by building on whatever measure of common interest the negotiating states can identify. CSBMs have an important role to play in facilitating communication among distrustful states, and some of the confidence-building value is achieved through the very process of engaging in the negotiation. Finally, embedded in CBMs and CSBMs is the notion of gradualism – they are inherently incremental and evolutionary, and are to be regarded as part of a step-by-step process of building up reassurance among states. Included in the notion of step-by-step is the idea that states should 'begin with what they can begin with', rather than by placing unrealistic goals on the agenda in the initial stage. This is what will enable the process to be set in motion.[2]

CSBMs can open up channels of communication, reduce tensions, encourage cooperation, enhance stability, and reduce the opportunities and motivation for cheating (verification measures). In the ACRS talks, four categories of CSBMs (that were borrowed from the European experience) were negotiated among the parties, with a surprising measure of success:

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[2] See Ariel Levite and Emily B. Landau, Confidence and Security Building Measures in the Middle East, in: *Journal of Strategic Studies*, 20:1, (March 1997), pp. 143-171.

- *maritime issues*: two documents were endorsed on SAR (search-and-rescue) and INCSEA (incidents-at-sea), and Tunisia agreed in principle to host an exercise at sea as well as a meeting of senior naval officers from the region;
- *pre-notification and military exchange:* an agreement on prior notification of military exercises was concluded, and the parties agreed to exchange information regarding military personnel, unclassified military documents, and military training and education;
- *regional communications network:* six parties (Israel, Jordan, the Palestinians, Tunisia, Oman, and Egypt) agreed in principle to participate in a temporary network set up in the Hague, and Egypt offered to later host the permanent hub in Cairo;
- *Regional Security Centres:* a decision was taken to set up three regional security centres: a primary centre in Jordan, with secondary ones to be established in Qatar and Tunisia. Their objective was defined as crisis prevention, management, and resolution.[3]

CBMs in the Middle East: From Assumptions to Harsh Realities

The assumptions

The logic of CBMs – gradual, consensual, non-threatening steps towards improved communication, lowering of tensions, and confidence and reassurance – seems quite solid. Moreover, the empirical evidence from Europe and the ACRS talks indicates that such measures can be agreed upon by states, even in very difficult conflict-ridden political settings, and that they can and do have considerable value.

However, as noted above, there are some critical assumptions supporting this picture. Key to the ability to proceed with CSBMs – and the broader arms control process that they are designed to support – is the presence of a common goal that the relevant states have an interest in advancing. The existence of such a common interest has critically underpinned previous experiences. In the superpower arms control process, the common interest –brought home by the Cuban missile crisis, when the superpowers found themselves on the brink of the abyss – was to mitigate the dangers of *unintended* escalation to nuclear war. With both states on hair-trigger alert, and massively armed with the most dangerous weapons humanity has known, they realized that they had a common interest in taking steps to reduce tensions so that they did not find themselves escalating to a nuclear exchange that neither side wanted.

The ACRS talks also built on a common interest, at least as far as regional security was concerned. Having just come out of the 1991 Gulf War, with the dangers of the use of long-range missiles starkly exposed, there was a common interest among Middle Eastern states to avoid the costs of war, and reduce the risks of escalation. These risks became very concrete when Iraq fired Scud missiles at Israeli population centres, a move that could easily have escalated to warfare between the two if Israel had not practiced noteworthy restraint. Although Iraq itself was not invited to ACRS at that time, the other regional states internalized the threat. Indeed, ACRS was a part of the broader Madrid peace process – with

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[3] Emily B. Landau, *Arms Control in the Middle East: Cooperative Security Dialogue and Regional Constraints*, Brighton: Sussex Academic Press (2006), pp. 42-47.

its bilateral and multilateral tracks – which underscored a degree of common interest among regional states to reorient their relations in the direction of peace and stability.

Currently, the proposal on the table in the Middle East is to hold a conference on a WMD-free zone. As noted above, the dominant assumption in this regard seems to be that there is a common – and equally defined – interest in doing away with WMD in the region. Moreover, suggestions to employ CSBMs would imply that the major stumbling block precluding such cooperation has to do with suspicions and distrust, and that these concerns also play out in an equal and symmetrical manner across the Middle East. The problem is that there is not much to support these assumptions in the current Middle East.

The harsh realities

The true situation in the Middle East with regard to WMD demands a 'reality check'; namely, there is a need to pose some very direct questions that go to the heart of some unthinkingly held assumptions that may actually have little basis in the real world. The kinds of questions that need to be asked and answered include the following: Is doing away with WMD in the region in fact a common interest that can serve as a basis for multilateral cooperation? Do all states believe they would be better off without WMD capabilities, and are their reasons for continuing to hold on to them, or to continue developing them (clandestinely) the same? Is the reasoning used by all states driven by security concerns, or do some apply a rationale which is primarily offensively oriented? And what about the issue of distrust – does it really play out equally across the region? Are all states deceiving each other – and the international community – in an equal manner?

In the Middle East today, the answers to these questions are anything but obvious; they cannot simply be assumed, but must rather be empirically examined and assessed. There is no way around looking at this region in its entirety, with critical political and strategic developments that cut in all directions. The political/strategic complexity of this region is enormous and can be overwhelming, and the reality is that the reasons behind the reluctance of different states to do away with WMD are very different, and certainly do *not* play out in the region in a symmetrical manner that would easily allow the formulation of a commonly defined interest in this regard.

Specifically, there is no basis for the implicit assumption of exclusively security-based concerns that preclude the ability of states to cooperate, or that these are equal and symmetrical. This point will be fleshed out below in the discussion of Israel and Iran in the nuclear realm, but even at the time of the ACRS talks, when the regional security dimension was emphasized and accepted as highly relevant, it became apparent that not all the states were equally concerned about security in the WMD realm. Egypt, for one, seemed more concerned about its relations with the other Arab states and its regional standing. It had returned to the Arab fold only three years earlier, after having been ostracized for ten years because it had concluded a peace agreement with Israel. ACRS was one of the regional forums that were initiated in the early 1990s, and was no doubt an important arena for Egypt to reassert its leadership role.

Today, the situation has become much more complex due primarily to the impact of Iran's drive to achieve a military nuclear capability. Iran's clandestine nuclear drive also highlights another problem that does not play out equally in the region: purposeful cheating and deception in the WMD realm. The issue of deceit has come more clearly onto the agenda with regard to other WMD as well. In his recent statement to the IAEA general conference on

September 19th, 2012, the head of the Israel Atomic Energy Commission (IAEC), Shaul Chorev, pointed to a blatant Syrian lie that was contained in a document that Syria presented to the UN in 2005 in the context of the country's report on implementation of Resolution 1540. Syria reported at the time that it neither possessed nor intended to acquire WMD, but in 2012 this was exposed as untrue. Over the summer, the Assad regime finally admitted to its chemical weapons stockpile – widely assumed to be in Syria's possession – when it threatened to use chemical weapons against any external forces that sought to intervene in the raging civil war.

Can nuclear CBMs play a role in the Middle East today?

Against this conceptual backdrop, we can proceed to examine the question of specifically nuclear CBMs in the context of a prospective discussion to be initiated in the Middle East today. The first point is that the very proposal of 'nuclear CBMs' contradicts a key feature of CBMs and CSBMs: as stated above, while they should be militarily significant, CBMs must not impinge on states' core security interests – they must not be conceived of as posing risks for states. For Israel, moving directly to the nuclear realm would no doubt be a non-starter. It not only goes directly to Israel's most sensitive security issue – namely, its critical deterrent capability in the face of existential threats – but it would also underscore the singling out of Israel and the nuclear realm, rather than emphasizing that this process is truly about WMD, and encompasses a number of key states in the region that have such capabilities.

Moreover, if the idea behind the notion of nuclear CBMs is to create an area of potential cooperation between Israel and Iran, in this regard as well the logic would be seriously flawed. There is no symmetry between Israel and Iran in the nuclear realm, in any sense. They have different motivations, a different history, and the rhetoric and behaviour of the two states is vastly different as well. Israel has a solid record of over 40 years of a defensive/deterrent stance in the nuclear realm, and the conventional wars that Israel has been involved in throughout the years underscore that its deterrence is solely for the extreme scenario of an existential attack. While, over the years, Israel's nuclear deterrence has at times been mocked by those claiming that it was useless for deterring wars, these critics are really missing the point. The fact that Israel has responded to enemy attacks without issuing nuclear threats, is the best testimony available to Israel's highly responsible approach in the nuclear realm. Israel maintains a low-profile deterrent for the sole purpose of warding off an existential threat.

Iran, on the other hand, on a regular basis engages in issuing existential threats to Israel, normally embedded in horrific rejectionist rhetoric. There is no equality in these two cases, and no symmetry that can breed a common interest in reducing tensions. Indeed, Iran's motivation in the nuclear realm has little to do with any threat it perceives from Israel in the nuclear realm. Rather, Iran has hegemonic interests and ambitions in the Middle East that it would be better able to realize once it acquires a military nuclear capability. If Iran were to become a nuclear state, no strong international power (such as the United States) would want to stand up to it coercively in response to Iran's attempts to aggressively encroach on other states in the Middle East. Doing so would be regarded as too risky. This is why Iran actively seeks a military nuclear capability; it is counting on this measure of immunity to counterattack that it would enjoy as a nuclear state, and this fuels its nuclear drive.

Concluding Remarks: What could nevertheless make sense?

The prospective discussion of a WMD-free zone must be fundamentally restructured to place its emphasis on the real problems that are plaguing the Middle East, and that underlie activities in the realm of WMD. The assumption of defensive-security rationales having prominence, and especially that they play out in an equal and symmetrical fashion in the region, must be laid aside and instead more realistic appraisals of what is going on in the Middle East carried out.

CSBMs are important first and foremost by virtue of the fact that they direct attention to the salience of interstate relations. This is crucial, but not sufficient. The next step is to understand that not every state's threat is a mirror-image of the other. Different states have different goals and different ways of going about achieving those goals. Communication and reducing tensions will not be relevant if a state is actually seeking enhanced power and hegemony, or does not accept the existence of another sovereign state.

It should be clear that the purpose of this analysis has certainly not been to undermine CSBMs or their significance in international relations. Rather, the argument being advanced is that these important measures depend for their effectiveness on some *commonly identified interest that all states can agree that they have an interest in promoting,* and will only have an impact when the major obstacle to progress is in fact mutual suspicions and distrust. Identifying a common interest in the politically complex Middle East is the primary challenge for the organizers of the WMDFZ conference idea. Without being able to formulate such a common goal, states are most likely going to continue to work at cross-purposes rather than together, and will unfortunately not be able to initiate a constructive regional dialogue.

Towards WMDFZ in the Middle East: Biological Confidence-Building Measures

DAVID FRIEDMAN*

Introduction

This article discusses biological weapons threats and possible opportunities to cooperatively address them, particularly as they relate to the Middle East region. Regional confidence building measures to prevent and prepare for pandemics, whether naturally occurring or man-made, are an area relatively ripe for regional cooperation, and one that could prove to be a major platform for enhancing confidence building and trust in the region, as well as a first step toward a Middle East zone free of weapons of mass destruction.

Arms Control and Non Proliferation in the Middle East

From political and strategic perspectives the Middle East is one of the most sensitive and complex areas in the world, and this is especially so regarding regional arms control efforts. Several factors make the situation particularly complex:

1. The State of Israel is perceived as a nuclear state. There is also an assumption that Israel has chemical and biological capabilities.
2. Israel has formal peace agreements with Egypt and Jordan only. It has no diplomatic relations with most of the countries in the region.
3. Countries in the region have offensive biological and chemical weapons programs. Syria and Iran have operational chemical capabilities, irrespective of their membership in Chemical or Biological Weapons Conventions.
4. Iran has a military nuclear program and has nuclear weapon aspirations, despite its membership in the NPT.
5. Israel is not a member of the NPT. It has signed but not ratified the CWC and has not signed the BWC.
6. Syria is a member of the NPT, has not signed the CWC, but has signed the BWC.
7. Egypt is a member of the NPT, has not signed the CWC, but has signed the BWC.
8. Iran is a member of all three conventions.

The parties to the Chemical and Biological conventions and other international organizations have invested considerable effort in promoting the universality of the conventions and on influencing countries in the region to join them fully. Egypt and Syria have made Israel's joining the NPT a precondition for their joining all such conventions.

During recent decades, efforts, formal and informal, have been made to promote a zone in the Middle East that is nuclear weapons free and free of all weapons of mass destruction. The

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1990s ACRS talks in the Middle East with American, Israeli, Egyptian, Jordanian, Canadian and European participation were one such example. These talks ultimately reached an impasse.[1]

Arms Control and Non-proliferation – The Israeli Perspective

Israel's political and strategic situation in the Middle East is not stable. Most countries and non-state actors in its surrounding first and second circles are neither in a state of peace nor even have proper political relations with it, and some threaten Israel's existence and declare their desire to destroy it. Some of the states have programs to develop and stockpile chemical and biological weapons, as well as operational arsenals of these weapons.[2] Furthermore, terrorist organizations such as Al-Qaeda, Hezbollah, and Hamas have declared on more than one occasion that for the purposes of destroying Israel, it is legitimate to use non-conventional weapons.[3] It is not inconceivable that as part of the military assistance that these organizations receive from various countries they will equip themselves with non-conventional weapons in the future.

Israel regards the aspiration to prohibit the stockpiling and use of non-conventional weapons positively, and sees the elimination of these weapons as an important goal. It certainly supports the principles of the Chemical and Biological Weapons Conventions, as well as the goal of a Middle East free of weapons of mass destruction. As part of this policy, in 1969 Israel signed the Geneva Protocol, which prohibits the use of chemical and bacteriological weapons in war. Israel likewise participated in preparatory discussions of the Chemical Weapons Convention and has even signed it, thus declaring that it identifies with its goals. While it has not joined the Biological Weapons Convention, it has emphasized in both declarative and practical terms that it is a party to the spirit of the convention. Over the years, Israel has also joined a number of processes and dialogues that have attempted to promote the idea of a Middle East free of weapons of mass destruction. Furthermore, Israel takes additional external and internal initiatives that promote the arms control and non-proliferation goals of the conventions. Thus, for example, Israel supports, and in practice, behaves in accordance with the supply regimes such as the Australia Group (AG).[4] It supported Security Council Resolution 1540 (2004),[5] whose goal is to combat and prevent the proliferation of weapons of mass destruction to dangerous elements and to fight unconventional terrorism, mainly through state legislation. Israel is undertaking related legislation and regulations, including control of the import and export of nuclear, chemical, and biological materials (2004);[6] control of dual-use products (2006); and the export control

[1] Emily B. Landau, ACRS: What Worked, What Didn't, and What Could Be Relevant for the Region Today, in: *Disarmament Forum*, No. 2 (July 2008), pp.13-20.

[2] Danny Shoham, *Chemical and Biological Weapons in the Arab States and Iran—An Existential Threat to Israel?*, Shaarei Tikva: Ariel Center for Policy Research Publishers (2001), pp. 73-98. <www.acpr.org.il/publications/books/syria-4-in-1-shoham.pdf>, Nuclear Threat Initiative, *Syria Country Profile—Chemical*, updated August 2012 <www.nti.org/country-profiles/syria/chemical/>, Nuclear Threat Initiative, *Iran Country Profile—Chemical*, updated November 2011, <www.nti.org/country-profiles/iran/chemical/> , and James Farwell, Syria's WMD Threat, in: *National Interest*, April 5, 2012, <http://nationalinterest.org/commentary/syrias-wmd-threat-6737>.

[3] J. B. Tucker, *War of Nerves. Chemical Warfare from World War 1 to Al-Qaeda*,New York: Pantheon Books (2001).

[4] Australia Group, *Guidelines for Transfers of Sensitive Chemical or Biological Weapons*, (June 2012). <www.australiagroup.net/en/guidelines.html>.

[5] UN Security Council Resolution 1540, S/Res/1540, April 28, 2004.

[6] Import and Export (Control of Chemical, Biological, and Nuclear Export) Order, 5764-2004, Tamas.gov.il, 2004, <www.tamas.gov.il/NR/rdonlyres/35E9E31F-AA99-40E9-A750-2AA349FBE588/0/ImportandExport_ControlofChemicalBiologicalandNuclearExport_Order.pdf >.

law (2007). The main goal of import and export controls on nuclear, chemical, and biological materials is to help prevent the proliferation of non-conventional weapons and their components by prohibiting export of materials, products, technologies, and services that can be used in the development and production of chemical, biological, and nuclear weapons. The list of prohibited materials is identical to international lists that have appeared in the Australia Group regime.

At this stage, the considerations and formal position of the State of Israel on ratifying the Chemical Weapons Convention, joining the Biological Weapons Convention, and agreeing to a weapons of mass destruction free zone (WMDFZ) is influenced decisively by the basic political-strategic situation in the Middle East, the position of other regional states towards the conventions and non-conventional weapons in general, the fact that a number of states in the region are stockpiling these weapons, and that at least one (Iran) is clearly violating the treaties to which it is a signatory. Therefore, and in spite of the fact that it assigns supreme importance to these objectives, Israel believes that in order to attain them significant developments must take place in the region, including mutual recognition by involved states, good neighbourly relations, confidence-building measures and peaceful relations. Only after these goals are attained can the states in the region continue to take upon themselves additional commitments, first in those areas covered under the provisions of the conventions, and later in more complex and sensitive areas lying outside areas covered by the conventions. No state needs to unilaterally take upon itself steps that will harm its essential security interests.

Towards WMDFZ in the Middle East – Biological CBMs

The vision of establishing a Middle East zone free of weapons of mass destruction is shared in principle by all governments in the region. While political and strategic realities continue to make the full achievement of that goal elusive, it seems that biological arms control presents the fewest political impediments to constructive discussions. There appears to be greater regional consensus on bio-related issues, such as the limited military utility of BW, threats posed by non-state actor acquisition, and the importance of facilitating regulated, yet unobstructed, peaceful applications of dual-use biotechnology. This makes BW a promising starting point for substantive multilateral engagement and confidence building on WMDFZ implementation.[7]

Four fundamental "pillars" would be needed to support implementation of a regional BW-free zone. These include: prevention of the acquisition or use of BW by state or non-state actors; response and mitigation in the event of a BW attack; enforcement of international or regional agreements, laws, standards, and best practices designed to prevent acquisition, development, or use of BW; and cooperation on peaceful uses of legitimate biological research, in the interest of bettering humanity and public welfare.

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[7] Benjamin Bonin, Personal Communication. Task Force on Technical Dimensions of a WMDFZ in the Middle East (2010).

Confidence-building Measures

The concepts of confidence-building measures (CBMs), and their variants confidence- and security-building measures (CSBMs), have been increasingly suggested in the post-Cold War era as the main mechanisms of conflict resolution and peace building.[8] Today, CBMs have become an almost standard acronym in any discourse on conflict resolution anywhere in the world. This has been a result of the positive achievements of CBMs in the European context. They succeeded in stabilizing the East-West détente agreements in the 1970s, and helped in averting the outbreak of a third world war. Having succeeded in Europe, it is suggested that CBMs and CSBMs can succeed anywhere else. However, analysts disagree on the utility of CBMs in other regions. There are those who argue that, in the age of globalization, CBMs are the major strategy of conflict resolution and peace building. However, other analysts contend that being an output of the European experience, CBMs will not necessarily work in other regions, and that at least a major change in their conceptualization must occur in the direction of taking the particular characteristics of each region into account before introducing them.

BTWC Confidence-building Measures

The first CBMs for the BTWC took the form of data exchange measures and were agreed upon during the Second Review Conference in 1986 'in order to prevent or reduce the occurrence of ambiguities, doubts and suspicions'. They were extended at the Third Review Conference in 1991. In this year conference efforts were focused on the work of the Ad Hoc Group, which was considering a legally binding system for states' declarations of relevant activities. In 2001, at the Fifth Review Conference, states made a number of proposals to improve and broaden the CBMs. However, as the conference was unable to agree on a Final Declaration, these proposals did not translate into action. Therefore, the topics that were agreed in 1991 are still valid today and are listed below:[9]

- Confidence-building measure A: Part 1: Exchange of data on research centres and laboratories; Part 2: Exchange of information on national biological defence research and development programmes.
- Confidence-building measure B: Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins.
- Confidence-building measure C: Encouragement of publication of results and promotion of use of knowledge.
- Confidence-building measure D: Active promotion of contacts.
- Confidence-building measure E: Declaration of legislation, regulations and other measures.
- Confidence-building measure F: Declaration of past activities in offensive and/or defensive biological research and development programmes.
- Confidence-building measure G: Declaration of vaccine production facilities.

[8] Mohammad El-Sayed Selim, *The Role of Confidence-Building Measures in Conflict Resolution. A Comparative Cross-regional Study with Special Reference to the Arabian Gulf Region,* (2007), pp. 169-182,
http://www.hufsmiddleeast.or.kr/PDF/1n800356.pdf.
[9] Iris Hunger and Nicolas Isla, Confidence-building needs transparency. An analysis of the BTWC's confidence-building measures, in: *Disarmament Forum* (2006), pp. 27-36.

Each year, every BTWC member state must submit a CBM return to the United Nations Department for Disarmament Affairs covering the previous calendar year. If a state has nothing, or nothing new, to report, it can use Form 0, indicating with just a tick whether there is no, or no new, information to declare on the different CBM topics. The UN collects and copies the CBM returns and distributes them to states parties. The United Nations does not, however, have a 'collection mandate'; it cannot ask states for their CBM returns. A limited amount of information from the CBMs is made public in the reports that the Department for Disarmament Affairs prepares for the BTWC review conferences. These reports list, in a yes/no format, which CBM forms states have submitted, but they do not contain declared data, much less provide analysis or evaluation of those data. Some states have made their CBM submissions public. Other state representatives have claimed that the CBMs are 'for government use only'. However, when adopting the CBMs, states did not specify that access to data would be restricted. Moreover, confidentiality obviously runs counter to the goal of transparency.

Biological CBMs in the Middle East

As mentioned above, a crucial step towards implementation of WMDFZ would be in the form of confidence building and technical exchange. It aims to bring together policy and technical experts from relevant countries to undertake cooperative projects on issues of practical relevance to WMDFZ implementation. These activities do not constitute actual implementation of a zone, but should contribute to developing key foundations while promoting linkages across national stakeholder communities (e.g. research communities, academic institutions, or even militaries). Activities during this stage do not necessarily require the all-out support of governments. Engagement can take place in the Track II and non-government areas if necessary. However, government recognition (if only tacit) of these activities' value would be desirable and indeed helpful for facilitating productive exchange.

Confidence building and technical exchange activities might include the collaborative development of draft agreements, laying out the major legal and organizational elements of a future WMDFZ, draft codes of conduct for governing and regulating legitimate peaceful research in the biological sciences and statements of principle on standards and best practices for controlling WMD, agreed upon and signed by key figures in relevant stakeholder communities. Science and technology base activities might include collaborative technical research and development and demonstration projects, developing and showcasing the potential of technologies relevant to implementing safety, security, materials control, and even verification measures in a future zone. General awareness building is also an important cross-cutting activity at this stage.

Health-care and Biological Preparedness CBMs

The initial response to an infectious disease outbreak (natural or man-made) is primarily a domestic government function. However, national governments cannot handle global microbial threats alone, and inadequate surveillance and response capacity in a single country can endanger national populations and the public health security of the entire world. Therefore, enhanced cooperation among states is increasingly vital to address the complexity of cross-boundary disease outbreaks and the resulting health problems. Effective regional disease surveillance networks have the potential to support long-term health, stability, and security in a region, and can be a valuable mechanism for under-resourced states to

collaborate on and coordinate health-care capacity building. Furthermore, it can also yield security benefits and provide a foundation for cooperation on more contentious issues such as biodefence.

The Middle East Consortium on Infectious Disease Surveillance (MECIDS)[10] is composed of public health experts and ministry of health officials from Israel, Jordan, and the Palestinian Authority and has the purpose of improving the region's ability to detect and respond to infectious disease threats. As demonstrated by the MECIDS response to recent disease outbreaks, such as the 2009 H1N1 pandemic, regional collaboration has been especially valuable for facilitating joint action, even in a region experiencing political conflict and with a challenged history of collaborative efforts on health issues against a specific health threat.

Unfortunately, MECIDS remains, up till now, the only example of regional Middle East cooperation on biological threats. More efforts should be made in the region to follow or enlarge this successful model to improve regional capacity to counter biological threats from any source.

Following are additional examples and suggestions for CBMs that can be implemented in the region:

- workshops on border security cooperation in relation to bio outbreaks and BW attacks
- Joint training courses – for law enforcers including police, customs officials, border security, and regulatory compliance officials with regard to:
– identifying anomalous activities that might suggest a covert bio-threat
– maintaining and sharing information on criminal and terrorist activities
– investigating pathogen releases
– enabling effective responses to bio-attacks and maintaining public order
  - A joint exercise for first responders focusing on optimal modalities for mitigating bio-attacks in the region, including victim treatment and hospital care, decontamination of affected sites, and imposition of quarantine and other restrictions on travel.
  - A workshop for law enforcers and scientists with regard to techniques for attributing responsibility for bio-attacks, including microbial forensics and intelligence sharing.
  - A conference on advanced methods for detection, diagnosis, pathogenesis and treatment of relevant pathogens.
  - A workshop on new methods and approaches for networking in epidemiology and surveillance.
  - A workshop on mechanisms for ensuring rapid and effective access to medical countermeasures in the wake of bio-attacks, including: research and development, manufacturing and stockpiling of vaccines; delivery logistics; and dispensation strategies.
  - A joint workshop on epidemiological research programs and policies for the treatment of and response to epidemics.

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[10] The Middle East Consortium on Infectious Disease Surveillance (MECIDS), http://www.mecidsnetwork.org/, July 3, 2008; see also L. Gresham, A. Ramlawi, J. Briski, M. Richardon, T. Taylor, Trust Across Borders: Responding to 2009 H1N1 influenza in the Middle East, in: *Biosecurity and Bioterrorism. Biodefense Strategy Practice, and Science*, 7:4 (December 2009), pp. 399-404, < www.nti.org/media/pdfs/bsp.2009.pdf?_=1322495797>.

- Workshops on biosecurity and biosafety capacity building and policies, including discussion of how to limit dual-use risks.
- Discussion of a regional coordinating mechanism for bio-safety, including relevant industry and university officials.
- A regional workshop/conference on education and ethics in the life sciences, including exchange of information and data, discussion of current status and cooperation in educational programs for scientists and students.
- Joint workshops on drafting and implementation of domestic BW-related laws, including especially those required by UNSC Resolution 1540.
- Data and information exchange and cooperation with regard to biosafety and biosecurity legislation, regulation, and export control systems.
- Discussion of a regional non-binding science and industry code of conduct for biosecurity and biosafety.
- Drafting of a non-binding statement of principles on biosafety and biosecurity.
- Development of a list of national contacts for bio emergencies.
- Workshops on the BW threat posed by sub-national actors.
- Expanding the framework of MECIDS to include more countries (currently to include Israel, Jordan and Palestinian Authority) and more relevant agents.

Conclusion

Although the Middle East is one of the most sensitive and complex areas in the world, especially regarding regional arms control efforts and prevention, coordinating preparedness strategies among states in the region may be possible. Cooperatively addressing biological threats could lead to constructive progress towards the otherwise elusive goal of establishing a weapons of mass destruction-free zone in the Middle East.

Biological and Chemical Weapons and the Prospective Disarmament Process in the Middle East

JEAN PASCAL ZANDERS[*]

The Final Document of the 2010 Review Conference of the Nuclear Non-Proliferation Treaty (NPT) calls for 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, on the basis of arrangements freely arrived at by the States of the region, and with the full support and engagement of the nuclear-weapon States'.[1] The passage aims for regional inclusiveness and discerns a role for the five permanent members of the UN Security Council who are also the only possessors of nuclear weapons defined under the NPT.

The call brings chemical and biological weapons (CBW) into future arms control discussions for the Middle East. Consequently, a key issue for the conference will be to determine what role, if any, the 1972 Biological and Toxin Weapons Convention (BTWC) and the 1993 Chemical Weapons Convention (CWC)—two global and comprehensive disarmament treaties—can play in furthering the ambition laid out in the NPT Review Conference document. Egypt, Israel and Syria are party to neither convention. Considering that they have thus far resisted international pressure to join those treaties, a crucial question will be how the diplomatic process that will follow the Middle East conference, assuming the conference is successful, can change their position.

The Status of CBW treaties in the Middle East

The Middle East is often presented as the region with low participation in global, multilateral arms control and disarmament treaties. This assessment is definitely correct when the previous forum that tried to control the acquisition of non-conventional weaponry, the Working Group on Arms Control and Regional Security (ACRS) of the Madrid peace process, met between 1992 and 1995. During that period, the CWC had not yet entered into force. Today, however, the overwhelming majority of Middle Eastern states are full party to the BTWC and the CWC and therefore enjoy the security and economic benefits provided by these treaties (see appendix).

Only three core states are absent from the roster: Egypt, Israel, and Syria. Both Arab states are signatories to the BTWC, while Israel has signed the CWC. They are all party to the 1925 Geneva Protocol prohibiting the use of CBW in armed conflict.

[1] *The Middle East, particularly implementation of the 1995 Resolution on the Middle East*, in: 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, NPT/CONF.2010/50 (Vol. I), Section IV, para. 7(a).

The two other states absent from the BTWC and CWC are geographical outliers. Despite being a party to the much younger CWC, Mauritania has neither signed nor acceded to the Geneva Protocol and the BTWC. The Republic of South Sudan acquired its independence on 9 July 2011, and could conceivably join all three agreements as a successor state once relations with Sudan stabilize. Oman and the United Arab Emirates never became party to the Geneva Protocol, but have assumed the full obligations and responsibilities of the CBW disarmament treaties.

The Status of CBW in the Middle East

This section sketches CBW-relevant developments in the Middle East since 1945. The region has witnessed two major confirmed instances of chemical warfare (by Egypt in Yemen and Iraq's attacks against Iran and the Kurds) and a possible third one (by Libya in Chad). Despite hostilities and inflammatory rhetoric, none of the cases involved Israel. Today, only one country, Syria, appears to have significant chemical warfare capacity.

No instances of the use of biological and toxin agents as a means of warfare have occurred. Despite some official statements and reports in Western capitals, biological weapons (BW) do not appear to be part of the strategic equation between any two Middle Eastern states. Some countries do have the knowledge and infrastructure to develop and produce agents for offensive use within a modest time frame after a political decision to do so. That, however, does not include time to design, test and produce delivery systems, or the time required to test the agents and train troops in their use on the battlefield.

Some regional countries may be investing in the development and production of natural and synthetic poisons and toxins. Such substances have been used on occasion to kill or otherwise harm individuals in covert operations.

Chemical weapons

On 29 April 1997 – the date of entry into force of the CWC – three states in the Middle East stood accused of possessing chemical weapons (CW): Iraq, Libya and Syria. Iraq used a variety of CW in the 1980–88 war with Iran and in the suppression of the internal Kurdish insurgency. After Iraq's ejection from Kuwait in 1991, UNSCOM inspectors identified and destroyed what essentially amounted to the country's entire CW arsenal. Although there were some accounting discrepancies, the long-term presence of UN inspectors, extended surveillance of the country by the US and the UK, as well as UN-mandated restrictions on dual-use technology imports meant that Iraq was unable to maintain or reconstitute a chemical warfare capacity. The country could not train troops, develop and produce agents, or test delivery systems. After the 2003 invasion of Iraq, the US and the UK did not find anything that amounted to CW capacity, but have proceeded to destroy the remnants of the programme and munitions recovered from the Iran–Iraq War battlefields. Because both countries are destroying weapons and equipment outside the OPCW framework, their operations have become somewhat controversial (with criticism coming notably from Iran). Notwithstanding, Iraq must submit detailed reports accounting for past CW activities (including destruction) and OPCW inspectors must proceed with their activities inside the country. Some munitions remain in buildings destroyed by coalition forces, which today are deemed too dangerous to access. The OPCW, the US and Iraq are looking into options to

resolve the matter. Aerial reconnaissance by the OPCW demonstrates that Iraq is progressing with the destruction of CW production facilities and that the damaged storage sites are undisturbed.[2]

Libya set up and operated a large CW production facility at Rabta during the 1980s and early 1990s. There were some allegations of Libyan CW attacks in Chad in 1987, but these have never been independently confirmed. On joining the CWC in 2004, Libya declared some 20 tonnes of mustard agent and aerial gravity bombs as the delivery system. By the time of the uprising in 2011, all declared delivery systems and much of the agent and precursors had been destroyed. After the overthrow of Gaddafi, the current regime has developed a new destruction schedule with the OPCW. In 2012 it has also declared a previously unreported cache of agent and munitions to the OPCW, indicating its commitment to the CWC.

Syria presently holds the largest CW stockpile in the Middle East. Its size and composition are unknown, but it is widely believed that it comprises various agents (VX and mustard; more recently, reports also speculate sarin) and different types of delivery systems (missiles and rockets, aerial bombs, and perhaps artillery shells). Syria's CW arsenal serves strategic purposes, more specifically as a weapon of last resort in the case of an existential threat. Although media reports and commentaries claimed that the statement by a Syrian Foreign Ministry spokesman on 23 July 2012 amounted to a confirmation of CW possession and expressed shock at the warning of CW use against foreign troops, the briefing merely corroborated what had been known for a couple of decades. In January 2009, President Bashar Assad had all but confirmed Syria's CW.[3] Some speculation about Iraq's transfer of CW to Syria prior and during to the 2003 war remains unsubstantiated.

Egypt had a CW programme at least in the 1960s, and used chemical warfare agents in the Yemen Civil War (1963–67).[4] This programme was reportedly scrapped after the 1973 Arab–Israeli War. A research and production facility operated in the outskirts of Cairo under the guise of a pesticide factory. The plant was reactivated in 1981 following a $12 million contract from Iraq, but President Anwar Sadat ordered it shut down. In the early 1990s, it was reported to be producing medicines.[5] In September 2012, a Kuwaiti newspaper reportedly quoting Egyptian security sources claimed that Egypt intended to use CW to 'smoke out' Al Qaeda-linked Salafist gunmen from the Sinai Peninsula.[6] Unless smoke or riot control agents were meant, the threat is in all likelihood baseless.

Iran was known to have had a CW production programme between 1988 and the early 1990s. It declared CW production facilities under the CWC, but no weapon holdings, which leads to some suggestions by the US that it was possibly hiding a secret stash. However, it is possible that Iran disposed of the agents and munitions shortly before signing the CWC or entry into force in a way that is incompatible with the convention (e.g., sea dumping).[7]

Israel has a widely publicized CW defence and protection programme. However, some uncertainty about its offensive dimensions exists, mostly due to (deliberate?) ambiguity. Prior

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[2] John Hart, Chemical weapon arms control and disarmament, in: *SIPRI Yearbook 2012: Armaments, Disarmament and International Security*, Oxford: Oxford University Press (2012), p. 400.

[3] Interview with Syrian President Bashar Assad, in: *Der Spiegel*, (19 January 2009), available from URL <http://www.spiegel.de/international/world/0,1518,602110-2,00.html>.

[4] At the time of Egypt's military intervention Yemen was not a party to the Geneva Protocol.

[5] Mohamed Heikal, *Illusions of Triumph*, London: Fontana (1993), pp. 91–93.

[6] Al Rai newspaper (Kuwait), as cited in: Egypt mentions chemical weapons to scare Sinai terrorists, in: *DEBKA file*, 21 (September 2012), at URL <http://www.debka.com/newsupdatepopup/2324/>.

[7] John Hart, Roger Roffey and Jean Pascal Zanders (eds*.), Iran's Disarmament and Arms Control Policies for Biological and Chemical Weapons, and Biological Capabilities*, Umeå: Swedish Defence Research Agency (December 2003), p. 31.

to the country's signing of the CWC, the Foreign Ministry routinely stated that Israel would not be the first to introduce such weapons into the Middle East. Nevertheless, it is almost certain that the country launched an advanced development and production programme in the first decade of its existence. The crash of an El Al Boeing 747 transport plane near Amsterdam on 4 October 1992 (i.e., before the CWC was opened for signature) revealed that the cargo contained three of the four precursors to sarin, including dimethyl methylphosphonate (DMMP). Although the compound has several legitimate civilian uses, the secrecy with which the investigation of the accident and the recovery and clean-up operations were conducted, fed speculation over its true purpose. Israel has also used toxic chemical compounds in individual assassination operations, including the use of fentanyl in an attempt to assassinate Hamas leader Khaled Meshal in Jordan in 1997.[8]

Besides state-run programmes, concerns exist in the Middle East about transfers of CW to terrorist entities and other non-state actors. In the 1970s and 1980s, Arab nationalist regimes (Egypt, Libya, and Syria) were thought to be capable of transferring such agents to Palestinian nationalist groupings; over the past 15 years the concerns shifted more to Islamic entities, notably Hezbollah and Hamas. Iran, and to a lesser extent Syria (perhaps as a conduit for Iran) have been implicated. No firm evidence to back up the allegations has emerged thus far. There have been, however, some reports of Palestinians poisoning fruit and other food exports from Israel over the past decades.

Biological weapons

Information about BW programmes in the Middle East after 1945 is sketchy. During and immediately after the Cold War several cases of reports and testimony alleged Arab BW development programmes, but they mostly lacked specificity.

The major exception was Iraq, who looked into BW during the late 1970s and again from the mid-1980s onwards. UNSCOM inspectors uncovered the extent of its weapon programme and were able to destroy much of it. According to UNSCOM data, Iraq worked primarily with the anthrax bacterium, botulinum toxin and aflatoxin, although its scientists were investigating weaponization of other agents too. Iraq developed several delivery systems, including warheads for ballistic missiles and gravity bombs. When the inspectors were forced to leave the country in December 1988, they had not been able to account for all amounts of agents, growth media and numbers of delivery systems. This allowed the US and the UK to claim that Iraq still possessed vast quantities as justification for their 2003 invasion of the country. Subsequent investigations by US and British teams revealed that Iraq had not reconstituted its BW programme.

Western sources often accuse Iran of pursuing an offensive BW programme in spite of its participation in the Geneva Protocol and the BTWC. Although it has an extensive and advanced vaccine programme, public sources do not make it possible to conclude that the country violates its treaty obligations.

As with the chemical threat, Israel runs an extensive and relatively open biological defence programme at Nes Ziona. The country does not comment on any offensive dimension of its research and development activities (in line with its chemical and nuclear work). It has a

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[8]   For instance, Yossi Melman, A secret agent, in: *Haaretz*, (31 December 2004), URL <http://www.haaretz.com/hasen/spages/521658.html>. Russian special forces employed fentanyl in the Moscow theatre hostage crisis in October 2002.

sufficiently developed biotechnological research and production base to support an advanced BW programme or reach breakout capacity. There appears to have been an offensive BW programme shortly after the foundation of Israel, but it may have been abandoned later in favour of the nuclear option.[9] In contrast, research into a variety of toxins for covert use may still be continuing now. During Israel's war of independence in 1947–48, Arab officials attributed some disease outbreaks to Jewish insurgents.[10]

Egypt, Libya and Syria are not generally believed to have set up BW-related programmes with perhaps the exception of some elementary research work. In the aforementioned Spiegel interview, President Assad denied Syria's interest in this weapon category. No reports seem to implicate other Arab countries in BW activities.

Potential complications resulting from the mandate

Despite the NPT's sole preoccupation with nuclear weaponry, the call for the Middle East conference brings CBW, as well as delivery systems for all types of non-conventional weaponry, into the ambit of the discussions. This will raise a welter of issues, whose intricate complexity, as well as the need to coordinate and integrate the discussions on the separate arms categories, may defy the best efforts of the most experienced diplomats. No example exists of a negotiated weapon-free zone covering *all* categories of non-conventional weapons (the exceptions being some uninhabited expanses, such as Antarctica, the seabed, or outer space). Nuclear weapon-free zones have been created in clearly defined geographic areas in which nuclear weapons were absent from the military equations or in which they had already been eliminated prior to the negotiations. Several regional agreements (but not treaties) on CW were agreed ahead of finalisation of the CWC. However, the one major effort to create a chemical weapon-free zone in Europe in the 1980s (when CW were still deployed on the continent) ended in failure, although the exercise nevertheless benefited the global negotiation of a chemical weapon ban. One regional BW agreement was concluded in 2001 in anticipation of the (failed) protocol to the BTWC.

Bearing in mind that, politically and psychologically, nuclear weapons and their strategic delivery systems are likely to command most diplomatic and analytical attention, the possibility exists that participants in the Middle East conference will take the BTWC and CWC as their point of departure to resolve CBW-related issues. However, as noted earlier, only three countries critical to the regional peace process remain outside both conventions: Egypt, Israel and Syria. The motives for maintaining their respective positions differ fundamentally from each other, which leads us to ask whether the treaties are the appropriate tools for addressing the issues underlying those positions.

Nature of legal regimes

The international legal regimes governing the legitimacy of the individual weapon categories differ fundamentally from each other. Whereas the international community adopted a fragmented approach to the control of nuclear weapons—individual agreements

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[9] Avner Cohen, Israel and Chemical/Biological Weapons. History, Deterrence, and Arms Control, in: *Nonproliferation Review*, (Fall/Winter 2001).

[10] W. Seth Carus, *Bioterrorism and Biocrimes. The Illicit Use of Biological Agents Since 1900*, (Center for Counterproliferation Research), Washington, DC: National Defense University (2001), pp. 87–88.

regulate aspects of the armament dynamic, are discriminatory, or introduce a total prohibition on their presence in demarcated geographical spaces—chemical and biological weapons are each the subject of a specific convention that sets a universal, fully comprehensive and non-discriminatory norm against their development, acquisition, possession or use. The prohibition applies to agents and equipment designed to be used with such agents. By drawing on the general purpose criterion, both conventions address the dual-use problem: the technologies as such are not banned, but rather certain purposes to which they may be applied, thus leaving legitimate civilian, defensive and protective, or prophylactic purposes unaffected. The general purpose criterion also avoids limitation of the treaty's scope to the technologies that existed at the time of the negotiations. As a result, both conventions cover any future agent or delivery system. States parties update their understanding of the treaty's scope by taking the latest scientific and technological developments into consideration at quinquennial review conferences. While the BTWC and CWC govern inter-state behaviour, they also require a party to transpose the international obligations into domestic law, thus extending the prohibition to any natural or legal person on its territory or any of its nationals working abroad. With respect to CBW, UN Security Council Resolution 1540 (2004) extended the latter principle to all UN members, irrespective of whether they are party to the BTWC or CWC.

With the exception of some plurilateral technology transfer control arrangements, such as the Missile Technology Control Regime (MTCR), the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies and some other control lists and codes of conduct, no global or regional regimes limiting the development, possession or use of delivery systems for non-conventional ordnance exist. The BTWC and CWC do prohibit equipment specifically designed for use with the proscribed warfare agents. This thus includes warheads, bombs and spray tanks, rockets and other dissemination devices, but not the carriers, such as ballistic missiles, aircraft, artillery guns or rocket launchers.

Doctrinal linkage of non-conventional arms categories

Fundamental reasons exist why major disarmament and arms control treaties only cover discrete (and in most cases, single) weapon categories or subcategories. More than anything else, functional equivalence determines whether an opportunity for arms reductions will present itself. Weaponry in a functionally equivalent relationship performs a more or less similar role in the military doctrines of two or more countries (e.g., US and Soviet/Russian strategic nuclear missiles in the START treaties, intermediate-range ground-launched nuclear missiles in the INF treaty). As quantitative or qualitative augmentation of weaponry in a functionally equivalent relationship is likely to elicit a similar response from an adversary, no extra security is achieved despite the higher level of armament. If the adversary responds in a different arms category, an asymmetrical functional relation may exist (e.g. missile defences vs. missiles in the current NATO–Russia contention). In contrast, both sides may reap financial and other benefits from reducing or eliminating their weapon holdings without damaging their respective security postures.[11] In the Middle East, however, nuclear,

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[11] The operation of functional equivalence is described in Jean Pascal Zanders and Elisabeth M. French, Article XI of the Chemical Weapons Convention: Between irrelevance and indispensability, in: *Contemporary Security Policy*, vol. 20, no. 1 (April 1999), pp. 64–69.

biological and chemical weapon capacities are distributed unequally across the region. Where the weapons exist, they perform dissimilar doctrinal functions or, alternatively, rivals assign similar doctrinal roles to different weapon categories without necessarily building a functional relationship between them (e.g. existential survival in the case of Israel's nuclear weapons and Syria's chemical arsenal). Functional equivalence is equally non-existent in cases of a power holding a (regional) monopoly on a class of weaponry. Finally, the many-to-one security relationships many Middle Eastern states perceive themselves to be locked into do not ameliorate the opportunities for disarmament either. Thus, for example, even if Israel and Syria were to agree on mutually reducing or eliminating their nuclear and chemical arsenals, the accelerating strategic competition with Iran would, in all likelihood, prevent Israel from rescinding its nuclear deterrent.

In summary, the absence of a critical precondition that enabled the conclusion of the BTWC and the CWC is non-existent for the three hold-out states in the Middle East,[12] meaning that arms control approaches other than adherence to formal and global treaties may presently be more useful to explore. The persistent political linkage of all non-conventional weapon categories with each other without considering their respective doctrinal roles, as exemplified by Egypt's refusal to become a party to the BTWC and CWC to pressure Israel into joining the NPT, also diminishes the potential contribution of both conventions in the early stages of the upcoming Middle East process.

Delivery systems for non-conventional payloads may range from home-made rockets and artillery shells over air-delivered bombs and missiles to intermediate-range ballistic missiles. In this realm too, capacities may vary considerably between individual Middle Eastern countries.

Verification: Contribution of the CWC to the Middle East disarmament process

The CWC is undoubtedly the most complex arms control or disarmament treaty today and has proven its ability to meet the goals set by the negotiators in the 1980s and early 1990s. In itself, it represents a remarkable compromise between the interests of individual states, the chemical industry and available technological options to ensure the treaty's integrity. From that angle, it appears a logical proposal to apply the CWC to the Middle East as part of an effort to achieve comprehensive disarmament of non-conventional weapons. Once the foundations have been agreed, the CWC and its verification machinery will undoubtedly contribute to the resilience of the regional disarmament framework. However, as a tool to reach such a framework it may prove to be less effective. Several factors come into play here:

- The CWC verification machinery is very intrusive for government agencies, military installations, and civil industry. With regard to challenge inspections, there is no right of refusal. All types of onsite inspections have provisions for managed access. While Middle Eastern countries party to the CWC have no problems with these procedures, for the remaining countries immediate exposure might pose an

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[12] See Zanders and French, op. cit., for the role of functional equivalence in the CWC universalisation process. For the evolving condition of functional equivalence as a consequence of scientific and technological developments and the challenges to the BTWC, see Jean Pascal Zanders, Challenges to disarmament regimes. The case of the Biological and Toxin Weapons Convention, in: *Global Society*, vol. 15, no. 4, (2001), pp. 361–85.

important psychological threshold. The obligation to report all CW programmes and identify related infrastructure (production facilities, storage sites, etc.) since 1 January 1946 may raise a similar psychological barrier (as it does for South Korea, which refuses to be formally identified as a CW possessor in documents by the Organisation for the Prohibition of Chemical Weapons, the OPCW).

- Despite its elaborateness, the verification regime is most detailed for the destruction of CW (which in the 1980s was a primary goal). This dimension of the treaty may be of lesser relevancy to achieving comprehensive disarmament in the Middle East.
- The other dimension, i.e. maintaining confidence in compliance that no future CW are being developed and produced in contexts of changing international relations and security, as well as rapidly evolving science, technology, trade and industrial production processes, will be more relevant to the Middle East once a framework for non-conventional weapon disarmament has been achieved. This is the area where Middle Eastern states will interact with each other, hopefully in a context of growing confidence in long-term compliance. This verification of legitimate activities (industry, trade, etc.) is now moving to the fore. Presently, the tools are less developed than those for overseeing weapon destruction and may need to be adapted over the next years if the same level of confidence as with CW destruction is to be achieved. The CWC has the instruments to enable amendments or other types of changes. States parties will, however, have to adopt a common vision on the future role of the convention in order to move ahead with such changes.
- The ultimate tool for confirming suspected non-compliance, the challenge inspection, has never been used. Some commentators perceive this as a weakening of the convention, and some experts from the Middle East view this as a major impediment if the CWC is to play a role in regional disarmament. Perhaps negotiators were too ambitious in their design of the challenge inspection procedure; perhaps the post-Cold War world proved to be more cooperative than anticipated and other mechanisms to address compliance concerns (such as bilateral consultations) turned out to be more effective in the new global context; perhaps the conditions that might have warranted the launch of a challenge inspection never materialised; perhaps the national intelligence data that must be the foundation for any call for a challenge inspection was never as firm as people might wish; and so on. Irrespective of possible reasons, other parts of Article IX to address non-compliance concerns are widely regarded to be efficient and effective. Meanwhile the OPCW is conducting increasingly sophisticated exercises to test and perfect challenge inspection procedures under realistic conditions.

At the same time, current dynamics in the Middle East may also not favour the CWC as a tool in the overall plan to achieve regional disarmament. Nonetheless, depending on the actions taken, the CWC may become an important tool for stabilization and consolidation of the regional disarmament framework:

- Presently, only Syria is known to possess CW. In view of the current civil war, it is most likely that soon after the current regime falls, international assistance will be available to secure the stockpiles. Even though it may still take a while before Syria joins the convention—international pressure tied to post-conflict assistance will play a big role—it is possible for the international community (e.g., via the UN) to call in

OPCW assistance. The more important point for this note is that elimination of Syria's CW would take place irrespective of a regional disarmament framework. The CWC, both with its expertise in overseeing destruction operations and reporting on progress, could take over quickly, with both Libya and Iraq serving as models.

- Some ambiguity exists regarding Israel's research and development activities in the CW area, although no indicators are available that it stockpiles such weapons or trains its troops in their offensive use. The greater problem for Israel may be its inability to open up its civilian and military establishments to international inspectors. Given the physical integration or geographic proximity of facilities where research and development in the biological, chemical and nuclear areas take place, there may be concern over inspectors possibly acquiring details of activities unrelated to CW. Nevertheless, having participated in the CWC negotiations, Israel understands the managed access procedures, and should be able to design a verification and inspection process that meets OPCW standards while safeguarding its legitimate security interests. India faced a similar problem with its Defence Research and Development Organisation (DRDO), which had actually produced approximately 1,000 tonnes of chemical warfare agent and munitions, and has managed to resolve them. Furthermore, any party to the CWC has the right to refuse inspectors who are nationals from another state party with which it has adverse relationships. Such refusal is formally communicated to the OPCW in advance, not at the time an inspection team is being assembled.

- Egypt's opposition to the CWC is politically motivated and tied to Israel becoming a party to the NPT. Today, it stands isolated in this position. If Syria's regime collapses and the international community moves to secure and eventually eliminate the CW stockpiles, this may remove Israel's reluctance to ratify the CWC (assuming that Israel's position is rooted in security, rather than ideological considerations). In this way, the country could quickly become the sole non-party to the CWC. However, it is not clear whether the current leadership in Egypt would show the same type of opposition to multilateral disarmament as the previous regime (although it still considers the universalization of the NPT primary). It is presumed that if the country were to become party to the CWC, most verification activity in Egypt would relate to its past CW programmes to ensure that no installations could be reactivated if mothballed or converted to other purposes.

Conclusion

At this juncture, the overall security mindset in the centre of the Middle East approaches that of a zero-sum game, which is not conducive to arms control or disarmament. It facilitates domestic arguments that the gravest dangers are external. Immutability equals stability in such a context. Recent political upheavals in the Middle East have introduced a factor of uncertainty in present and future regional security interactions. However, they also offer opportunities for change, particularly with respect to everyday cooperation on a mundane level. Bottom-up levels of cross-border cooperation—be it in science and technology, industry and trade, health and disease surveillance, or any other area—can promote dialogue, including on security issues. Such activities could thus be critical to enabling national leaders

to modify their public discourse over time and, as a result, alter the framework for considering and discussing national security interests.

Since the 1990s, some major developments took place, including the entry into force of the CWC, the participation of a growing number of Middle Eastern states in the BTWC and CWC, and the verified nuclear, chemical and biological disarmament under international supervision of some regional state actors. Opportunities offered by international arms control, disarmament and non-proliferation treaties, whether in terms of security guarantees or possibilities to promote regional cooperation, should be explored to the fullest. However, mere universalization of those treaties with a view of achieving a Middle East zone exempt from non-conventional weapons may not be the preferred route as it would ignore underlying requirements for regional peace and stability that are central to disarmament. Indeed, disarmament treaties create their own realities within the boundaries set by agreement-specific definitions and through daily practices. These do not necessarily correspond to the realities as perceived by the local population or meet the demands for security and compliance assurances in zones of conflict. Even if the Middle East process were able to reconcile the ambitions of global treaties with perceptions on the ground, fundamental differences in the nature of the arms control and disarmament agreements, the scope of their coverage and how firmly established they are as normative will inescapably produce problems of coordination and integration of the discussions of the various arms categories.

The question thus arises whether other measures should not prepare the ground for the BTWC and CWC to become relevant tools in buttressing security in the Middle East. The successes – both at the intermediate and final stages – of prospective arms control and disarmament processes would then inevitably lead to greater confidence that global treaties do not undermine national or regional security.

Appendix: Middle Eastern States party to the BTWC and CWC

(As of 30 September 2012)

Country	Geneva Protocol [EIF: 8/02/1928]	BTWC [EIF: 26/03/1975]	CWC [EIF: 29/04/1997]
Algeria	8/01/1992	22/07/2001	29/04/1997
Bahrain	20/10/1988	28/10/1988	29/04/1997
Egypt	6/12/1928	[Sign: 10/04/1972]	
Iran	3/08/1929	22/08/1973	03/12/1997
Iraq	7/04/1931	19/06/1991	12/02/2009
Israel	22/01/1969		[Sign: 13/01/1993]
Jordan	10/10/1976	30/05/1975	28/11/1997
Kuwait	3/01/1971	18/07/1972	28/06/1997
Lebanon	3/03/1969	26/03/1975	20/12/2008
Libya	17/10/1971	19/01/1982	05/02/2004
Mauritania			11/03/1998
Morocco	27/07/1970	21/03/2002	29/04/1997
Oman		31/03/1992	29/04/1997
Qatar	18/04/1976	17/04/1975	03/10/1997
Saudi Arabia	10/01/1971	24/05/1972	29/04/1997
South Sudan			
Sudan	22/4/1976	17/10/2003	23/06/1999
Syria	11/09/1968	[Sign: 14/04/1972]	
Tunisia	15/05/1967	18/05/1973	29/04/1997
Turkey	25/05/1929	25/10/1974	11/06/1997
UAE		19/06/2008	28/12/2000
Yemen	26/01/1971	01/06/1979	01/11/2000

Building Confidence over Biological Matters in the Middle East

UNA BECKER-JAKOB[*]

Introduction

The idea of a Middle East Weapons of Mass Destruction Free Zone (MEWMDFZ) dates back to an Egyptian proposal from 1990 (CD/989, 20 April 1990). Linkages have long been made between the three categories of weapons that are commonly subsumed under the heading of WMD: nuclear, chemical and biological weapons. Ultimately, all three will have to be addressed together to achieve the goal of such a zone. However, this does not exclude the possibility of first steps of confidence-building – a prerequisite for reaching this goal – that address the three weapons categories separately. The field of biological weapons presents itself as a good starting point.[1]

First, almost all states of the region are parties to the 1925 Geneva Protocol or the 1972 Biological Weapons Convention (BWC), or both.[2] They have thus either foregone with the option of using such weapons or that of maintaining a capability to do so. Moreover, a strong taboo exists against biological weapons, and the prohibition of biological weapons use has entered in international customary law and is thus considered binding on all states.[3] Offensive biological weapons capabilities should thus have no active role in the security doctrines of the states in the region.

Second, at the current stage of biotechnology, biological weapons are considered of low military utility.[4] This is all the more true in a region characterised by states in close proximity to one another, since biological agents, once released, are hard to contain and will not stop at borders. Depending on the agent, the use of biological weapons – if it were to be considered despite the legal and moral barriers – would carry the risk of affecting the employer's own population. It would also be certain to provoke very strong and determined international reactions. Even a purely military–utilitarian rationale would thus be unlikely to favour a biological weapons option.

Third, there are concerns that recent advances in biotechnology, if exploited for weapons purposes, might one day change the military utility assessment and make biological weapons more attractive for certain kinds of military action. Even if this happened in spite of the strong norm against biological weapons, it would make the case for biological confidence-

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[1] For a similar view see Nilsu Gören, *Is Biosecurity the Low-Hanging Fruit?* (WMD Junction, James Martin Center for Nonproliferation Studies), (10 January 2012) http://wmdjunction.com/120110_biosecurity_mideast.htm.

[2] This paper uses the IAEA list of potential members of a Middle East Nuclear Weapons Free Zone as a working list of potential MEWMDFZ members. See IAEA, *Technical Study on Different Modalities of the Application of Safeguards in the Middle East*, (1989) http://www.iaea.org/About/Policy/GC/GC33/GC33Documents/English/gc33-887_en.pdf.

[3] See Anders Boserup, *CBW and the Law of War. The Problem of Chemical and Biological Warfare*, Solna: SIPRI, (1973).

[4] Covert targeted actions might be an exception, but biological agents would probably still not be weapons of choice for all but very few scenarios due to their low degree of predictability and high dependence on target conditions.

building and transparency even stronger as the latter may contribute to preventing the growth of yet another perceived threat in a region in which tensions are high anyway.

Fourth, defined more broadly, biological threats – including bioterrorist and biocriminal acts, accidental releases of dangerous pathogens, and natural disease outbreaks alongside biological weapons use – are increasingly perceived as serious and potentially growing threats. Defending against these threats requires domestic preparedness and international/regional collaboration, e.g. information sharing and technological cooperation in disease surveillance, contingency planning, and detection. Improving biological safety and security as well as public health systems and contingency measures, a crucial factor in biodefence and preparedness, would entail broader benefits for the populations of the region. This is true in particular in situations which present great challenges to health systems, for instance, in less developed areas or in cases of large refugee movements. Exchanging relevant information and possibly exploring opportunities for collaboration in the field of biology and biotechnology and, by implication, public health should thus be in the interest of all actors involved. It could contribute to confidence-building by increasing transparency in national protection measures and in biotechnological activities, many of which have high dual-use potential.

This paper proposes three sets of preliminary measures aimed at stimulating interaction in the region in the biological area, with the ultimate aim of increasing transparency and trust as well as preparing steps more closely related to a MEWMDFZ. The steps proposed here would work through the reaffirmation of existing legal obligations and through exchanges of information on various biological issues.

Reaffirming the Non-Use of Biological Weapons

Two international agreements deal with prohibitions of biological weapons. The 1925 Geneva Protocol (GP) prohibits the use of chemical and biological weapons in war. The 1972 Biological Weapons Convention (BWC) prohibits development, production, stockpiling, acquisition and retention of biological weapons. As of October 2012, 165 states were parties to the BWC, while the Geneva Protocol had 137 members.[5] All states in the Middle East are members of at least one of the two agreements, most have joined both. All but three are full members of the BWC; Egypt and Syria have signed it, and only Israel is a non-member.[6] Oman and the United Arab Emirates are the only Middle Eastern states not party to the Geneva Protocol.

A number of parties to the Geneva Protocol attached reservations to their ratifications, which, *inter alia*, limited the applicability of their obligations under the Protocol towards other states parties and/or towards those states that respect the Protocol provisions. Several members have by now withdrawn these reservations, but those concerned in the Middle East have not yet done so.[7]

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[5] For the BWC see http://www.unog.ch/80256EE600585943/%28httpPages%29/7BE6CBBEA0477B52C12571860035F D5C?OpenDocument; for the GP see http://disarmament.un.org/treaties/t/1925 (27 September 2012).

[6] Their signature obligates Egypt and Syria 'to refrain from acts that would defeat the object and purpose' of the BWC, which includes inter alia development, possession and proliferation of biological weapons (1969 Vienna Convention on the Law of Treaties, Article 18).

[7] Bahrain, Jordan, Kuwait, Libya and Syria have, in addition, attached a reservation stating that their membership in the Protocol would not constitute recognition of the state of Israel.

Country	BWC Member	GP Member	GP Reservation Use of BW[8]
Bahrain	X	X	X
Egypt	Sign.	X	--
Iran	X	X	--
Iraq	X	X	X
Israel	--	X	X
Jordan	X	X	X
Kuwait	X	X	X
Lebanon	X	X	--
Libya	X	X	X
Oman	X	--	n/a
Qatar	X	X	--
Saudi Arabia	X	X	--
Syria	Sign.	X	--
United Arab Emirates	X	--	n/a
Yemen	X	X	--

Table 1: Membership of BWC and Geneva Protocol in the Middle East; reservations attached to GP ratification

Given developments in international humanitarian and disarmament law over the past decades, reservations limiting the prohibition of BW use are by now *de facto* obsolete. For those states who are also members of the BWC – all except Israel – they are void because the renunciation of the possession of biological weapons precludes any possibility of their use. The two BWC signatories Egypt and Syria have never attached reservations to their GP ratification. Even for Israel, which maintains its reservations on biological weapons use and has not joined the BWC, the use of biological weapons would not be a legal option given the universal prohibition under international customary law.

With this relatively solid legal and normative basis against biological weapons in the Middle East, the following acts of confidence-building could be considered:

- In a first step of collective confidence-building, all states of the region could **affirm their commitment to the non-use of biological weapons** – a commitment that is legally binding on all of them anyway. Preferably, this would take the form of a joint declaration, but if this is not politically feasible at this point in time, states could issue separate but concerted statements. The two Middle Eastern states that are not yet members of the Geneva Protocol – Oman and the United Arab Emirates – could join this agreement to underline their statement; a logical and supposedly uncontroversial step since both are members of the BWC.

- As a second measure, those states that maintain reservations intended to limit the scope of the Protocol could **withdraw these reservations**. As outlined above, they

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[8] See http://disarmament.un.org/treaties/t/1925.

are void anyway, and such symbolic action would underline the sincerity of the first step.[9]

As regards the BWC, universal membership of all Middle Eastern states would be a high but desirable aim and might ultimately be necessary to achieve a MEWMDFZ.[10] It has so far been prevented, *inter alia,* by the well-known linkages established between the possession of weapons and membership in all three major WMD treaties – the NPT, CWC and BWC – and by Israel's unclear stance towards the BWC. While accession to the BWC without preconditions might thus not be a practicable immediate option, the three states outside the BWC might consider additional statements renouncing biological weapons. This would be merely declaratory in nature but it would still be a step forward from the status quo. Egypt has already expressed its appreciation of the BWC and its objectives, most recently at the 7th BWC Review Conference in 2011. While the current situation in Syria makes such a move difficult at this point in time, it remains to be hoped that a full and effective renunciation of biological weapons will be part of any post-conflict settlement. Any form of official distancing from biological weapons would be welcome and needed from Israel, which is the only BWC non-signatory and whose policy regarding BW and the BWC has been opaque.

Given the universal prohibition on biological weapons use and the strong general taboo on these weapons, publicly renouncing a weapons category that offers no realistic possibility for military application should, the existing political linkages and difficulties notwithstanding, be considered a reasonable price to pay in return for significant political or symbolic gains on the road to a Middle East weapons of mass destruction-free zone.

Confidence-Building in the Biological Weapons Field

The BWC suffers from various weaknesses, but it does possess a system for (potential) confidence building that might be of some use in a Middle Eastern context. The confidence-building measures (CBMs) agreed under the BWC were devised to reduce uncertainty and increase transparency with regard to relevant state activities. They were not intended as an instrument to ensure or verify compliance with the treaty, nor could they serve this objective. Taking the BWC CBMs into consideration in the context of a Middle Eastern WMD-free zone might be surprising at first glance. After all, the CBMs are politically binding only for the members of the BWC. Secondly, they were established in a particular phase of regime development to serve a particular purpose *within* the BWC regime. Thirdly, only few Middle Eastern states have in the past participated regularly in this CBM exchange, which indicates a lack of enthusiasm for this measure in its original context.[11] Fourthly, and probably most significantly, even within the BWC regime the CBMs do not enjoy the support of all states parties for political reasons, the participation rate has been low ever since their inception, and

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[9] For a general discussion of the universal prohibition of biological weapons use, the GP reservations and their withdrawal see Nicholas Sims, The Future of Biological Disarmament. Strengthening the Treaty Ban on Weapons, London/New York: Routledge, (2009), pp. 19-28.

[10] See Mark Fitzpatrick, Towards a More Secure and WMD-Free Middle East, in: *UNA-UK Briefing Report No. 2,* (2012), p. 13, http://www.una.org.uk/content/towards-zero-briefing-report-no-2-towards-more-secure-and-wmd-free-middle-east-mark-fitzpatr.

[11] As of October 2012, Bahrain, Iran, Iraq, Jordan, Lebanon, Libya, Qatar and Yemen have submitted CBMs under the BWC at least once since 2007.
http://www.unog.ch/80256EE600585943/%28httpPages%29/4FA4DA37A55C7966C12575780055D9E8?OpenDocument

the efficiency and efficacy of the CBM system has been under criticism. So why consider them in this context at all?

One simple reason is the very fact that they exist – the forms are readily available, and using them or a selection as templates, to be adapted to region-specific information exchanges, would save negotiation time. This could be accompanied by an express agreement that this process would be disconnected entirely from the BWC. Egypt, Israel and Syria could thus engage in the exchange with the understanding that this does not have implications for their legal relationship with the BWC, and those states that harbour political reservations about the CBMs in the BWC context could still join the regional endeavour. As regards the content of such regional CBMs, the following information exchanges could be considered:

- **on research facilities and laboratories** of biosafety level 2 and higher[12]
- **on vaccine production facilities** or related research and development efforts
- **on relevant publications** and **scientific collaboration**
- **on national legal steps taken to criminalize biological weapons** and **prevent the misuse of biology for hostile purposes**

Enhanced **transparency in national biodefence activities and declarations of past offensive biological weapons programmes** would of course be most useful CBMs on the way to a MEWMDFZ, but also the most far-reaching and difficult to attain. They should nevertheless be kept in mind as possible steps further down the road of regional confidence building. This would be all the more important since there are concerns and uncertainties about the state of biological weapons proliferation in the region.

To be clear, the idea is not necessarily to use the BWC formats as they are, but as a starting point from which more fitting (and more acceptable) measures could be developed, without having to invent new measures from scratch. The challenge would be to transfer and adapt CBMs from the BWC to a Middle East context without carrying over the multifaceted political baggage associated with them in the BWC regime.

Building Confidence and Cooperation in Public Health, Biotechnology, Biosafety and Biosecurity

If the use of BWC CBMs as a starting point were to prove impracticable, in parallel to their adaptation states could agree on a mode of data exchange that would be somewhat removed from the biological weapons issue proper but could still initiate a beneficial process and thereby prepare the groundwork for politically more sensitive interaction at a later stage. The areas listed below touch upon biological *weapons capabilities* only indirectly but have implications for proliferation and biodefence. They are more directly related to the safety and security of biotechnology and its application (which is likely to grow further in the region), to transfer controls and to public health.[13] Most of the issue areas proposed here resemble issues

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[12] Laboratories are classified based on their equipment, safety and containment measures, ranging from 1 (lowest) to 4 (highest), see WHO Laboratory Biosafety Manual, 3rd edition, 2004, http://www.who.int/csr/resources/publications/ biosafety/WHO_CDS_CSR_LYO_2004_11/en/. Work with pathogens requires different safety levels depending on the dangers posed (e.g. virulence, transmissibility, available vaccines/treatment); the standards can vary from country to country.

[13] For related proposals see CNS Task Force, *Overview and Recommendations from Track II Technical Discussions on the Biological Weapons Dimensions of Implementing a WMD Free Zone in the Middle East and North Africa,* (2011), http://cns.miis.edu/activities/pdfs/121214_bw_mideast_wmdfz.pdf.

that have figured prominently in the BWC regime over the past decade. The proposal to consider similar issues on a regional basis and with a different objective in mind is not to prejudge their function *within the BWC regime*. Rather, it is recognition of their practical utility in containing biological risks and threats on a broader basis. The measures proposed are of potential benefit to all actors in the region, and collaboration in this area might thus be more amenable. Given the high dual-use potential of biology and the convergence of health and security concerns in the biological realm, such collaboration can be considered a preliminary step on the way to a MEWMDFZ.

With regard to *public health*, exchanges might be considered regarding

- national **disease surveillance, detection and response** capacities
- **contingency plans for disease outbreaks** (natural <u>and</u> deliberately induced)
- **assistance** available in cases of biological weapons attacks and/or severe disease outbreaks

In order to be manageable and effective for the purpose of building confidence regarding security issues, the exchange could be limited to measures related to pathogens that have been discussed as possible biological agents. While further information exchanges and collaboration in the public health sector could immediately benefit all those involved and would thus be welcome, their relation with confidence building in the biological *weapons* area might be more remote. Moreover, a number of actions in this area might either already be covered by or fall into the purview of the WHO and its Regional Office for the Eastern Mediterranean (which operate under a non-political mandate), and duplication of efforts and resources should be avoided.[14] Public health could thus represent a good point of departure to get dialogue and interaction underway. In combination with other measures, it could also contribute meaningfully to preparing a MEWMDFZ.

With regard to *biotechnology and industry*, information could be shared

- on the **biotechnology sector** (if existent), its areas of priority, rationales and planned development, as applicable, as well as on the nature of investment (state or private, domestic or foreign).

Depending on the country in question, on the state and organization of its economy and industry sector, and on the mode of government, the nature of such information may vary considerably from actor to actor. Nevertheless, creating transparency in industry developments as far as possible may help shape understanding of the level of development, priorities and biotechnological capabilities. It may also open up possibilities for technological and/or economic cooperation.

With regard to *national control measures*, the following could be addressed:

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[14] http://www.who.int; http://www.emro.who.int.

- national practices and policies regarding the **safety and security of biological technology, laboratories, material and know-how**, including **raising awareness** about the potential for misuse of biology and biotechnology
- national **transfer controls**
- national policies regarding the criminalization **of dangerous or illegitimate biological activities** (regardless of treaty membership).

Many aspects covered by these topics correspond to international legal obligations under the WHO International Health Regulations (IHR, 2005) and UN Security Council Resolution 1540 (2004). All Middle Eastern states are parties to the IHR, and all have at least submitted initial reports to the 1540 Committee.[15] Regardless of their political stance towards these instruments, they should thus be able to draw on existing information that could be shared in the region, supplemented by any information or elaboration that they collectively consider useful for the purpose of confidence building in the Middle East. Where applicable, such an exchange would create transparency concerning the safety and security of biotechnology in the countries of the region, which may serve as indicators of the potential risk of accidents with and unauthorized access to biological agents. It may also facilitate increased national efforts or regional cooperation aimed at improving national safety and security. This would benefit national security and biological safety; it may also reduce a given state's own perceived or actual vulnerabilities and/or perception of threats emanating from elsewhere. It is this latter aspect that would be of particular value in preparing a MEWMDFZ.

Institutional arrangements

Provided that Middle Eastern states could in principle agree on any form of information exchange, channels would be needed to facilitate cooperation and communication, in particular given the existing obstacles to direct communication between some actors. Since there is no suitable regional or bio-specific international organization at hand, other clearing house arrangements would be needed that could be accepted and viewed as impartial by all relevant actors. The following options could be considered:

- the UN, either through the Executive Office of the Secretary General (EOSG) or the Office of Disarmament (UNODA)
- any government that is acceptable to all relevant actors as mediator and that is willing to provide good offices
- the Facilitator appointed for the 2012 Middle East Conference, Ambassador Jaakko Laajava of Finland

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[15] http://www.who.int/ihr/legal_issues/states_parties/en/; http://www.un.org/en/sc/1540/national-implementation/national-reports.shtml. For other proposals to use the 1540 reports in a Middle East confidence-building context see Fitzpatrick 2012, *Toward a More Secure and WMD-Free Middle East*, p. 15; Harald Müller and Claudia Baumgart-Ochse, *A Weapons of Mass Destruction-Free Zone in the Middle East. an Incremental Approach*, Background Paper EU Non-Proliferation Consortium, Brussels, (2011) p. 5,
  http://www.nonproliferation.eu/documents/backgroundpapers/muller.pdf.

Conclusions

This paper has listed several possible confidence-building steps in the area of biological weapons and biotechnology that might in the long run help facilitate movement towards a MEWMDFZ. Most of these steps are have modest aims in that they build on existing obligations and measures that would only need to be modified and adapted to the specific requirements of a confidence-building process. Several of them would probably only yield information that is available anyway from open or intelligence sources. The point at this stage, however, is not to acquire or supply new information, but to demonstrate willingness to share information in a structured and reciprocal way, to engage in focused interaction, and to discuss bio-related issues on a regional basis.

The proposals were consciously designed as first steps on a long road – none of them would provide immediate certainty about the presence or absence of biological weapons capabilities and intentions anywhere in the Middle East. This is based on the assumptions that a) given the current intricate situation in the Middle East, even low-key interaction and information exchanges could serve a confidence-building purpose by demonstrating willingness to engage, and b) such confidence building would need to precede any more far-reaching and binding steps. Only *after* a more robust basis for interaction, communication and trust has been created in the region will it make sense to negotiate more demanding steps which would then in turn reinforce confidence. The proposals in this paper might serve as building blocks: the indirect, facilitated communication could later be replaced by direct interaction; states could agree to follow-up action to the information exchanges, including visits or concerted intergovernmental action such as shared standards, guidelines or practices;[16] new areas could be included; voluntary exchanges could be turned into mandatory submissions by way of a regional agreement. Ultimately, a regional verification system would have to be set up. Given the intricate situation surrounding verification in the BWC, taking a regional basis for this might be more conducive, at least initially. Here, at the latest, the process would have to merge with discussions regarding chemical and nuclear weapons in the Middle East as well as other international developments (e.g. in the BWC). However, delinking the biological field from the other fields at this early stage could result in health, security and economic benefits for the individual states in the region while at the same time building confidence and fostering the goal of a Middle East free of weapons of mass destruction.

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[16] See also Müller/Baumgart-Ochse 2011, *A Weapons of Mass Destruction-Free Zone*, p. 4; CNS Task Force 2011, *Overview and Recommendations from Track II Technical Discussions*.

Building Confidence Towards a MEWMDFZ via a Chemical Weapons Ban

DINA ESFANDIARY[*]

It is no surprise that the road to the establishment of a Middle East WMD-Free Zone (hereafter MEWMDFZ) has been a rocky one so far – and the process has only just started. This is largely due to the suspicion that exists in the region; there is not enough trust or as a result, a sufficiently strong sense of the security dividend that would flow from a WMDFZ. One way to overcome the deficit of trust would be to capitalise on regional endorsement of the Chemical Weapons Convention (CWC) as a first step towards a general WMD-Free Zone in the region.

This paper will examine how states in the region could agree to work towards a zone free of chemical weapons as an incremental step towards a MEWMDFZ. Although many have argued against the idea of breaking up WMDs,[1] the regional landscape at the moment is such that the best way to get to a complete MEWMDFZ is by taking it one step at a time. In fact, the only way towards building the levels of trust necessary is by selecting an issue which is important enough that is meaningful to all parties, yet realistic enough that an agreement could potentially be reached. That is, phasing weapons out by category.

The problem is identifying what category of weapons should be tackled first which would serve countries in the region as both a positive outcome they can present to their domestic population as well as a tangible step closer to a general WMDFZ. This paper will argue that ridding the region of chemical weapons should be the first place to start. History has shown that chemical weapons are the most widely used and proliferated weapons of mass destruction, and the current crisis in Syria demonstrates the risk of ignoring the threat posed by chemical weapons. In addition, the Middle East has already clearly validated the international norm against these weapons by largely adhering to both the Geneva protocol and the Chemical Weapons Convention (CWC).[2] For these reasons, the fastest road to a MEWDMFZ is to begin with eradicating chemical weapons from the region.

This paper will begin by outlining the reasons why an "all or nothing" approach to a WMDFZ in the Middle East will not work. Instead, trust must be incrementally built in the region by tackling one WMD at a time and gradually establishing a complete MEWMDFZ. The essay will then examine why addressing chemical weapons should be the first step and examine ways to come to an agreement banning chemical weapons in the region.

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[1] In particular Egypt. See Carmen Wunderlich et al., Non-Aligned Reformers and Revolutionaries. Egypt, South Africa, Iran and North Korea, in: Harald Müller/ Carmen Wunderlich (eds.): 2013. Norm Dynamics in Multilateral Arms Control: Interests, Conflicts, and Justice. Athens: University of Georgia Press, (forthcoming) for a selection of statements from Egyptian officials to this effect.

[2] David Santoro, Status of non-proliferation treaties, agreements and other related instruments in the Middle East, EU Seminar to promote confidence building and in support of a process aimed at establishing a zone free of WMD and means of delivery in the Middle East – background paper (July 2011), p. 5-6.

Challenges in the Middle East

The Middle East is plagued by suspicion, sectarian tensions, rivalry and hostility. Firstly, the level of trust between Israel and Iran is so low that the goal of establishing a complete WMDFZ in the Middle East is almost fantasy. In addition, the Arab Spring, which began almost two years ago, has highlighted some of these tensions and exacerbated regional instability. The changes in government in some countries and the instability in others have diverted the attention of policy makers towards internal issues rather than towards the goal of establishing a WMDFZ in the Middle East. In this context, the critical players in this region are not prepared to take the initial steps first, which are necessary to making a WMDFZ agreement possible.

Israel is unwilling to take part in a process which is likely to single it out as the only nuclear-state in the region requiring the dismantlement of its programme. Its fears are not unfounded. In fact, the more general Middle East WMDFZ (as opposed to just a nuclear weapons-free zone) process was kicked off internationally in a document that did just that. The 1995 Resolution on the Middle East that was adopted during the NPT review conference not only called for "the establishment of an effectively verifiable Middle East zone free of weapons of mass destruction, nuclear, chemical and biological, and their delivery systems", but also for "all States of the Middle East that have not yet done so, without exception, to accede to the Treaty as soon as possible and to place their nuclear facilities under full scope International Atomic Energy Agency safeguards".[3] This clearly pointed the finger at Israel. To add insult to injury, the 2010 NPT review conference repeated the encouragement for nuclear states to join the NPT and specifically mentioned Israel in the section on the Middle East.[4] Israel has made it clear that in its view, a Middle East WMDFZ can only be achieved if the process originates and culminates in a regional process and begins by addressing tensions and conflicts in the Middle East.[5]Indeed, Israel is adamant that its security concerns must be addressed prior to any discussion of such a zone. Given Arab insistence on Israel's nuclear weapons, it is not unsurprising that the Israelis have shown reticence towards the 2012 conference.[6]

But Israel is not alone. Although Iran is one of the pioneers of the Middle East WMDFZ, co-sponsoring the idea with Egypt in 1974, it has shown some reservations to the current process. Iran took exception to the 1995 resolution idea of extending the nuclear-weapons free-zone to all WMDs and their delivery systems, stating that the extension of the agenda had inevitably complicated the process and made the end goal more 'elusive'.[7]In the current environment of mistrust, Iran is unlikely to take steps to slow its nuclear programme down. This is because Iran, along with all the Arab states, insists that such a zone cannot be established until Israel signs the NPT and places its programme under IAEA supervision, though Iran is aware that unilateral Israeli disarmament is unlikely (if not impossible). Iran's stated support for a Middle East nuclear-weapons free zone is in line with its objective of

[3] Resolution on the Middle East, NPT/CONF.1995/32/RES/1, http://www.fas.org/nuke/control/npt/text/resoluti.htm

[4] 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons Final Document, NPT/CONF.2010/50 (Vol. I), p. 29, http://www.un.org/ga/search/view_doc.asp?symbol=NPT/CONF.2010/50%20(VOL.I).

[5] Shaul Chorev (Head, Israel Atomic Energy Commission), Statement to the 56th General Conference of the International Atomic Energy Agency (September 2012), http://iaec.gov.il/About/SpeakerPosts/Documents/IAEA%20statement%20Sep2012.pdf.

[6] Israel rejects U.S.-backed Arab plan for conference on nuclear-free Mideast, Haaretz (20 September 2012).

[7] Nasser Saghafi-Ameri, A Nuclear Free Zone in the Middle East : An Iranian Perspective, Institute for Middle East Strategic Studies (12 June 2012).

stripping Israel of its most powerful weapon. Naturally, Israel is aware of this, which explains its scepticism towards the MEWMDFZ.

Although the general desire to achieve a Middle East WMDFZ is strong amongst Arab states, the political will to achieve it has considerably diminished. This was the case for the Gulf Arabs. Following revelations about Iran's nuclear programme in 2002, the Gulf Cooperation Council (GCC) states, initially second-tier players in this process, began to work together to facilitate the establishment of a zone.[8] But it became apparent that they faced competing priorities, and limits on time and resources available to devote to the issue. The long-lasting political and strategic considerations in the Middle East, such as diverging threat perceptions and the absence of a common security agenda, exacerbate the impediments. Establishing a WMDFZ as a whole today is aiming too high.

A step-by-step approach is the most feasible way of "changing military capabilities in the direction of less threatening postures (which) is one of the most convincing ways to signal good intentions and build the necessary confidence to change political relations".[9] In other words, the incentive for states in the region is the security dividend they get from constraining their own strategic options. Without building greater levels of trust, states will remain sceptical that the security dividend will materialize.

Why focus on chemical weapons?

The Arab states in particular have not made it a secret that the goal of a MEWMDFZ is first and foremost to confront the spread of nuclear weapons in their region.[10] But as established, this is unlikely to occur anytime soon. In order to make progress on the WMDFZ in the Middle East, other WMD categories must be tackled first. Chemical weapons should be addressed first because of the nature of their properties as well as the stigma that surrounds them.

Chemical weapons are defined as "toxic chemicals and their precursors" fitted into "munitions or devices" to cause "death or other harm".[11] These weapons, often called "the poor man's bomb", require a relatively low investment and are capable of causing significant psychological and physical effects, as well as disrupting agricultural production and slowing advances on the battlefield. Chemical weapons are also effective weapons of fear, because of their indiscriminate nature and their unpredictability. Although chemical weapons carry many risks, and are subject to topography and weather patterns, other properties make them an attractive equalizer for states looking to build a deterrent capability in a region characterised by asymmetrical military capabilities.

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[8] Dina Esfandiary, Elham Fakhro, and Becca Wasser, Obstacles for the Gulf States, in: Arms Control Today, (September 2011).

[9] See Harald Müller's and Claudia Baumgart-Ochse's EU Non-Proliferation Consortium Background Paper, for a more detailed explanation of the benefits of a step-by-step approach to a MEWMDFZ. Harald Müller and Claudia Baumgart-Ochse, *A Weapons of Mass Destruction-Free Zone in the Middle East: an Incremental Approach*. Background Paper, EU Non-Proliferation Consortium, Brussels, (2011),
    http://www.nonproliferation.eu/documents/backgroundpapers/muller.pdf.

[10] Dr. Hossam Eldeen Aly, Objectives and Approaches of Arab States, in: Preparing for a Constructive 2012 Conference on the Middle East Weapons of Mass Destruction Free Zone, NYU-Center on International Cooperation, (April 2012), p. 9, http://www.cic.nyu.edu/engagement/docs/wmd_book.pdf.

[11] Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention), Article 1.

All states in the Middle East have signed and ratified the 1993 Chemical Weapons Convention (CWC), with the exception of Israel, Syria and Egypt. Such wide acceptance of the norm against chemical weapons in the region provides a valuable starting point for the development of a zone free of CW.[12] But despite the endorsement, accession and compliance with the CWC has at times been patchy. Iraq and Libya joined relatively recently. They had active chemical weapons programmes, which have either been dismantled or are in the process of being eliminated. In addition, Iran is alleged to have a CW programme. The fact that a number of countries in the region have either shown interest in or developed chemical weapons programmes makes their eradication as a first step towards a WMDFZ in the Middle East a worthwhile endeavour.

The World Wars are the only theatre in which chemical weapons have been more widely used than in the Middle East in the 20th century. The Egyptians employed chemical weapons in the North Yemen Civil War, and the Iraqis used them against Iran's 'human wave' attacks in the Iran-Iraq war in the 1980s as well as against the Kurds. The vivid regional memory of chemical weapons use can be a spur to developing such a zone. There is an added domestic benefit for signatories to any agreement to ban CW from the region, as respective leaders would be able to announce to their people, with some justification, that they have removed a potential tool of terror from the arsenals of regional adversaries. This is important given that states in the region – on both the Arab and Israeli side - are particularly concerned with ways to avoid looking weak when it comes to disarmament.

Furthermore, the on-going crisis in Syria, a known chemical weapons state, has highlighted the importance of chemical weapons by focusing the attention of the international community on the threat of their use in the region, and on the difficulty in securing them.[13] Assad's programme is shrouded in secrecy: very little is known about the size of Syria's chemical weapons stockpiles or their exact locations. While the civil war has increased the risk of loss of control over facilities and weapons, the lack of actionable and sufficiently complete intelligence and the limits on resources available to devote to the issue have conspired to leave the rest of the world with a small number of equally unattractive options.

Why not biological weapons?

There are two key reasons why BW are not as good a candidate as CW when it comes to achieving the first step of an incremental approach to MEWMDFZ: they are not as important militarily, or politically. The reason this makes CW more important is that an agreement on chemical weapons would provide better publicity for signatories, both domestically and within the region, and would also have a significantly greater impact on the level of security in the region, thereby boosting confidence and trust to levels sufficient to begin the process.

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[12] Almost all states in the Middle East are also party to the 1925 Geneva Protocol. For more information on non-proliferation treaties in the Middle East see David Santoro, Status of non-proliferation treaties, agreements and other related instruments in the Middle East, EU Seminar to promote confidence building and in support of a process aimed at establishing a zone free of WMD and means of delivery in the Middle East, background paper, (July 2011).

[13] For more information on the threat posed by Syria's chemical weapons and the options available for securing them see Unease grows over Syria's chemical weapons, IISS Strategic Comment (August 2012), http://www.iiss.org/publications/strategic-comments/past-issues/volume-18-2012/august/unease-grows-over-syrias-chemical-weapons/ .

BW are dangerous weapons of disruption that deliver toxins and microorganisms to deliberately inflict disease among people, animals, and agriculture.[14]But BW have limited military utility because of their properties: compared to other WMDs, BW are harder to detect, but also harder to control. Most agents are contagious, spreading through individuals rapidly and making targeted attacks using BW virtually impossible. The ability of organisms to infect rapidly and effectively is subject to many conditions, which means it cannot be relied upon in a military setting. The possibility that biological agents could infect one's own troops makes them a risky choice.[15] Because BW have limited military applications, addressing their threat as a confidence building measure towards the enormous goal of a MEWMDFZ is simply insufficient.

It is also the case that an agreement on biological weapons in the Middle East would carry significantly less political weight than an equivalent agreement on CW. It would be a less potent message to bring home to domestic audiences, especially given the region's experience with chemical weapons. It would also be a less profound step towards enduring improvement in regional trust – the only way towards a general MEWMDFZ.

Practical roadmap to a Middle East CWFZ

In order to come to an agreement on banning chemical weapons in the region, states will have to begin by verifying current holdings. That is, finding out who has them and how much is stockpiled. Although many will express scepticism at the idea, accounting for regional stockpiles of chemical weapons will be easier than doing so for nuclear weapons. States like Egypt could be incentivised to increase transparency about their CW stockpiles if they were offered assurances that Israel and Iran would do the same. Although convincing the region to be transparent with their chemical weapons will still be difficult, it will be infinitely easier than getting both Israel and Iran to tell us more about their nuclear programmes.

The main challenge is that Arabs who are not yet bound by the CWC (or BWC) have linked their ratification to Israeli nuclear disbarment. Syria's chemical weapons programme is a clear example of this.[16] If the process begins with CW, with a view to achieving a total MEWMDFZ, as part of a genuine global agenda issue (not just as part of the NPT process), then the political pressure to comply may be enough to induce even those who are more sceptical. In addition, positive incentives could be explored as another way for states like Syria (who will likely be the most reticent) to join the movement. In addition, a zone free of CW would of course be negotiated while discussing nuclear disarmament as well so that it is clear that other WMDs would be addressed next.

The next step to a phasing out of chemical weapons in the Middle East would include a Memorandum of Understanding (MoU) to eliminate stockpiles in the context of a generally signed agreement among those who have CW. This would be followed by a MoU for non-development of CW for everyone in the region. To ensure countries are eligible to sign, verification, perhaps by an organisation such as the Verification or Inspectorate Divisions of

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[14] Introduction to biological weapons, Federation of American Scientists.
[15] For more information on the military utility of BW, see Kathryn McLaughlin and Kathryn Nixdorff (Eds), BWPP Biological Weapons Reader, Geneva: BioWeapons Prevention Project (2009), p. 10-11, http://www.bwpp.org/documents/BWPP%20BW%20Reader_final+.pdf
[16] For more information on the place of WMD programmes in Syria's security policy see Michael Elleman, Dina Esfandiary, Emile Hokayem, Syria's Proliferation Challenge and the European Union's Response, Non-Proliferation Papers, No.20 (July 2012), p. 2-3, http://www.sipri.org/research/disarmament/eu-consortium/publications/Nonproliferation-paper-20.

the Organisation for the Prohibition of Chemical Weapons (OPCW) would follow. Finally, the states in the Middle East would sign an agreement banning chemical weapons in the region as a first step to building trust and moving towards establishing a MEWMDFZ.

Conclusion

The goal of establishing a MEWDMFZ has existed for many years but very little has been accomplished to make it happen. The changes the region has witnessed in the past two years have made this endeavour both more important and less likely. It has also become clear that tackling the zone as a whole, with the aim to ban all WMDs and simultaneously address all security concerns has become unrealistic. Aiming to build confidence between states in the region through the incremental phasing out of WMDs is the only available option. Starting with CW will ensure that the region has set an achievable goal that is still significant enough, both nationally and regionally, to ensure that trust is built and the region is one step closer to a WMDFZ.

A Middle East free of Missiles and Weapons of Mass Destruction: An Iranian View

NASSER HADIAN[*]

This article provides an overview of Iran's security concerns and examines challenges and opportunities associated with Iran's nuclear programme. The article will first provide a background on the evolving nature of Iran's security environment and the historical factors affecting Iranian perceptions and policies. It will then address the contexts, sources, and factors shaping Iran's decision-making process in terms of its nuclear programme and national security. Finally, the different Iranian points of view on the nuclear debate will be explored. In conclusion the feasibility of a Middle East free of missiles and WMD will be discussed.

The background

The 1979 Iranian Revolution transformed the geopolitics of Iran overnight, taking it from being one of the closest and most strategically important allies of the United States to being one of its most vehement opponents. At this pivotal juncture, Iran's threat perception and foreign policy priorities dramatically changed with respect to its immediate environment and the world at large. Shortly thereafter, the Iran-Iraq war (1980-1988) deeply affected the minds of Iranians and policymakers alike. Iran felt as though it had not received support in its war with Iraq, going from being a Western client-state to fighting an Iraq that had the political support of important countries in the Arab world and the West, including the United States. In terms of military supplies, Russia, China, and France sold billions of dollars of arms, the Arabs provided money, and the United States provided satellite imagery along with other kinds of support to Iraq. The most relevant analytical factor in this discussion is the use of weapons of mass destruction (WMD) by Saddam's troops – chemical weapons in this case – against the Iranians and Iraq's indigenous Kurdish population.

The Iranian leadership also concluded that the leaders of the world's powerful nations could easily be persuaded to ignore the crossing of a 'red line' (i.e. the use of chemical weapons) for short-sighted interests or because of simple animosity towards the regime in Tehran.

The next important event that greatly impacted Iran was the collapse of the Soviet Union. A new geopolitical environment emerged, which changed the balance of power around Iran. Iran found itself bordering three new neighbours, two of which were vying for Caspian Sea access. New opportunities to cooperate with these countries were blocked by the manoeuvrings of regional states and great powers to isolate Iran, especially in the energy sector.

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Two points are worth emphasizing about Iran's decision-making process. First, no single person or particular group has the authority to make decisions on major issues alone. Second, Iran makes decisions on key issues through consensus. Iran's defence and security decision-making are articulated by and developed in a complex process. Numerous formal institutions, informal networks, personal relationships and individual initiatives play a role in the formation of Iranian policy. From the outside, it may seem very chaotic, and it is often difficult for outsiders to understand who makes what decisions and how. Nevertheless, the output of the system is based on consensus. While this consensually-driven process provides policy stability, it does make reaching decisions more difficult, less predictable, and arduous.

Despite elites eagerly factionalizing and politicizing major national security issues, including those related to the nuclear programme, consensus ensures that sensible decisions are the final product. There is no doubt that decisions about the nuclear programme are made within a relatively smaller circle but, nonetheless, a circle that is representative of the relevant and influential political factions.

A key characteristic of Iranian perception regarding security issues is its strategic loneliness. Partly the result of the revolution's character and nature and partly self-inflicted, this loneliness was most dramatically displayed during the eight-year war against Iraq. This created an Iranian psychology that lacks trust in international institutions and alliances and which emphasizes reliance on its own resources, both mental and physical, for national protection and defence. While the cost and damage from this imposed self-sufficiency have been enormous, it has nevertheless also interjected and infused a sense of confidence, national pride, ability to manage crises, and domestic development of our country's own resources unparalleled in the region. This combination of loneliness, independence, and self-sufficiency underscores both Iran's cautious attitude towards regional conflicts, on the one hand, and its bold – even tough – style on issues of national significance on the other. Iran has a seasoned elite that, while displaying idiosyncrasies of its own in missing opportunities, is quite capable of manoeuvring during real crises, not only with regional states, but also with great powers such as the United States.

Three points are worth emphasizing in order to understand Iran's national security policies. First, one must assess Iran's intentions and policies in terms of rationality – not sympathy – taking Iran's arduous geostrategic environment into account. Second, in spite of this challenging security framework, Iran has not only managed to maintain its territorial and political integrity, but it also has developed considerable infrastructure and a stable society – all without external support. Third, Iran is the most important linkage state in the Middle East. Because of its geography, revolution, ambitions, and jealously guarded sense of independence and centrality, all issues of importance in the Middle East, either by default or design, run through Iran – from the Palestinian-Israeli conflict, proliferation, terrorism, Iraq's future, stability in Afghanistan, future of relations between Islam and the West, regional political change and reform, Persian Gulf security, to secure energy access in both the Persian Gulf and the Caspian Basin. Therefore, isolating Iran is not a productive policy.

Policy Sources

Decisions about Iran's nuclear programme are made and influenced at the ideological intersection of Islam and nationalism. Iran's threat perceptions, past experiences, organizational imperatives of involved agencies, national pride, as well as economic and

geopolitical considerations all play significant roles in informing and framing Iran's nuclear policy. Seven important factors are influential in the specific formulation of Iran's nuclear programme:

1. Ideological Sources

Three important ideological outlooks and orientations have played an influential role in informing and shaping national security and defence policies in Iran - Revolutionary Islam, Reformist Islam, and Traditional Iranian Nationalism. Depending on the particular issue and the constellation of political forces involved, and also considering the relevance, interaction and impact of external players, any or a combination of these three outlooks/orientations comes to bear on policy-making. As is often the case, failure to arrive at a reasonable degree of consensus among the three competing camps inevitably leads to serious problems in implementation.

2. Threat Perceptions

Threat perception can be categorized into threats to Revolutionary ideology/values and threats to our national interests. The dominant ideological approach is that 'global arrogance' (US imperialism) and international Zionism are out to destroy Islam. From this perspective, Iran is seen as the centre of the Islamic world, which provides leadership to the Islamic Ummah (nation) that the United States is trying to destroy. 'Global arrogance' and Israeli aggression are the most significant and immediate threats. This outlook also maintains that US puppets in the region pose dangers as well, though less imminent.

Iran's national interest becomes more important when there is incompatibility with ideological priorities. Geopolitical issues, territorial integrity, and enhancing Iran's international standing by demonstrating the primacy of Iran's national interests are more influential in shaping Iran's security and defence policies. Threats emerging from Iran's immediate environment are considered more dangerous than those from countries further away, provided that ideological considerations are not the driving forces behind the foreign policies of other countries.

3. Organizational Imperatives

The Atomic Energy Organization of Iran (AEOI), a number of universities and research institutions, and defence establishments are involved in the production and exchange of knowledge and technology in the field of nuclear energy. Certainly, like other bureaucracies in the world, they have their own concerns and interests in finding new projects and tasks to ensure their preservation and expansion. They are very concerned that Iran, in dealing with the International Atomic Energy Agency (IAEA), would accept a concession that prevents these organizations from achieving their goals of survival and 'logical' expansion.

4. National Pride

Iranians, as historical inheritors of an old, millennial civilization with a deeply-felt grandiose perception of themselves, their role and power, especially in the wake of a successful popular social revolution in 1979 – which has added rejuvenated ideological fervour [revolutionary Shi'ite ideology] to traditional Iranian nationalistic pride – appear to

have found it quite difficult to accept that their young, newly established neighbours have more wealth and opportunities, more advanced technology, and a higher standard of living. Given the stark differences at the material level, the ruling elite have instead tried to argue that advancement in science and technology (particularly in the nuclear, stem cell and software areas) could empower Iran and help raise the country to its deserved place in the world. This outlook could well explain the dogged pursuit of the nuclear programme – even if at tremendous costs – especially if placed in the larger context of a region consisting of three nuclear neighbours (Israel, India and Pakistan), which has led some Iranians to feel that achieving a comparable power status necessitates acquiring nuclear capability.

5. Past Experiences

As stated before, the long, bloody and destructive war with Iraq, including Iraq's extensive and repeated use of chemical weapons against Iranians and also the war of cities, deeply affected the psyche of the Iranian population at large – reviving the old memories of a nation that since ancient times has been subjected to frequent foreign invasion and occupation. The Iran-Iraq War experience, especially the UN Security Council's unbelievable refusal to condemn the act of aggression and call for the immediate withdrawal of forces, and the later failure to react strongly to Iraq's numerous war crimes, including resorting to chemical weapons, led Iran to conclude that it simply could not rely on the United Nations to safeguard its national security and defence. The bitter conclusion that the international community could not be trusted proved extremely costly during the war and came to cast its long shadow on the foreign and defence policies of the Islamic Republic afterwards. As seen by Iran's longest-serving foreign minister, 'Historical precedent is in fact an important input into Iran's foreign policy.' (Velayati, 1998).

6. Economic Imperatives

Especially considering the quite high level of education, Iran's almost 75 million people have expectations of a higher standard of living and a better life. Taking national resources and capabilities, including abundant oil revenues, into account, it is now a fact that more than three decades after the 1979 Revolution Iranians expect a higher level of governance and much better national economic performance. As is widely known, the Iranian government – in fact, the Islamic Republic - is under serious pressure to perform. It is safe to predict that, on the whole, economic issues will exercise increasing influence on Iran's future security and defence policies. At the same time, low rates of economic growth and capital formation will, in the final analysis, also negatively impact the country's expenditures in the military-defence sector.

7. Geopolitical Considerations

Iran is located in an area rife with upheaval and is surrounded by quite a number of ongoing conflict situations – instability in Afghanistan and Iraq and uncertainty in Azerbaijan and Pakistan are most noteworthy. Extensive US presence in many of the areas in Iran's immediate vicinity or in the wider region is challenging and poses a problem – the lack of any meaningful buffer or physical space between the two sides that regard each other with deep suspicion and hostile intentions. Iran and the US are literally neighbours – all around Iran, to the South, East, West and North. Such an unenviable position for Iran is bound to

enhance the impact geopolitical issues, situations, and considerations have on the country's security and defence policies

Iran's Nuclear Programme

In contradiction to a common belief in the West that all Iranians have the same view of their nuclear programme, three general views on it can be identified. The following discussion will outline the three main opinions in Iran and their relevant features.

1. The Nuclear Programme as a Source of Energy

A small number of people argue that, due to environmental and economic reasons, nuclear energy is not a necessity for Iran. They argue that the cost of investment for generating a kilowatt of electricity is more expensive using nuclear energy than it is by other means, such as oil. This view, which is also Washington's main line of thinking, has few adherents in Iran.

A significantly larger group believes that Iran needs nuclear energy and should acquire expertise and technology in this area; it is seen as the technology of the advanced world and a potential source of pride and prestige for Iran. This group argues that the right to nuclear technology is enshrined in the Nuclear Non-Proliferation Treaty (NPT) and does not see any reason to forego it. It is a popular view amongst numerous university students, members of academia, government officials and many in the Foreign Ministry. People in this camp, however, maintain that Iran should have access to nuclear technology for civilian uses only and that nuclear weapon technology should be prohibited, as this would violate Iran's international commitments and would contribute to regional proliferation. Proponents of this position argue that if Iranians are denied the right to access nuclear options, the international community will push Iran into a more isolated position that will adversely affect oversight and monitoring of Iran's nuclear programme.

2. Supporters of Nuclear Weapons Capability

Some argue that Iran should not only have nuclear technology for alternative sources of energy, but also possess nuclear weapons capability. For supporters of this outlook, the security environment of Iran, given the past history of being victimized by chemical weapons, the poor track record of the international community in aiding Iran during times of crisis and the numerous threats perceived by Iran necessitate the development of this capability. There is a nuance that should be appreciated in this perspective. Some merely argue that the capability to produce fuel for the reactors is sufficient. Their main concern is not typical security per se, but rather that they can be self-sufficient in the event that other states cannot or will not provide nuclear fuel for reactors. Another part of this group argues that it is, in fact, important for Iran to have all the necessary elements and capabilities for producing weapons. Full capability, put simply, includes mastering the knowledge and technology of the fuel cycle, a reliable delivery system, and an appropriate warhead. The first two components are considered legal and coincide with the predominant interpretation of the NPT. I have co-authored an article in Farsi about the differences between legal capability and full capability, which one Iran is seeking and which one would serve Iran's foreign policy objectives best; due to lack of space I cannot repeat them here. Note, however, that Iranians only want the capability, not the actual physical weapons. The capability alone is an

important strategic deterrent in their view, and it can make a positive contribution to Iran's defence and national security; that is, the simple fact that Iran could develop nuclear weapons relatively quickly with the materials at hand within the country enhances Iran's power while not becoming too threatening to others.

3.   Supporters of Acquiring Nuclear Weapons

A small number of people indeed argue that Iran should withdraw from the NPT and develop nuclear weapons as quickly as possible, even if it must pay the price of international sanctions to do so. This stance is justified by citing international hostility towards Iran, Iran's precarious security environment, and how such weapons would provide an ideal deterrent. With nuclear weapons, Iran could preserve its territorial integrity, ensure its security, and enhance Iran's status in the region and the world at large. Few people in academia and the military would support this view.

The last group has few supporters in Iran because it represents an extreme position. The majority of Iranians, including elites and governmental officials, support the more moderate first or second views.

However, few relevant elites in Iran would doubt that if Iran wants to develop the actual weapons, hardly anything can stop it. The United States and the West have already placed severe economic sanctions on Iran in an attempt to modify the behaviour and attitude of Iranian officials on issues such as terrorism, WMD, and the Arab-Israeli conflict; none of these objectives have been achieved. According to the US State Department, Iran is still on the list of State Sponsors of Terrorism and continues to oppose the peace process in the Middle East. Meanwhile, the IAEA claims that Iran has made vast improvements in its nuclear infrastructure and capability. Some would argue that if the international community imposed much tougher sanctions, it would force those who favour weaponization of Iran's nuclear programme to quit, but the bottom line is that if Iran is determined to develop nuclear weapons (although this author does not believe that is so), it has the capability to do so and nothing can stop it. For example, Iran's financial resources that can aid a nuclear weapons programme even now are significantly greater than those of Pakistan. Thus, additional sanctions will likely be unsuccessful in changing the minds of Iranians who favour weaponization.

On a fundamental level, pursuing a nuclear programme aiming at acquiring atomic arms implies security contradictions for Iran. There are several reasons and factors explaining Iran's refraining from acquiring nuclear weapons, including the following:

1. *The risk of an arms race breaking out*: Iranian acquisition of nuclear arms could stimulate its neighbours and other regional states to follow a similar path. Regional states' efforts to acquire nuclear arms could transform the region into an insecure one with nuclear arsenals and lead to the beginning of an arms race instead of the realization of a nuclear-free zone;

2. *Iranian awareness of risks*: We in the region are well aware of the dangers of nuclear weapons for the security of all the nations in the Middle East. We *know* that we do not have a sophisticated communication network or command structure; we *know* that the most probable vehicle for use of such weapons would be missiles, and we *know* that it would take only a few short minutes for these missiles to hit important sites in the targeted country. In other words within a few minutes the incoming missiles should be detected, distinguished from

other kinds of conventional missiles, directed to relevant channels and command structures, and respond appropriately in time. I *know* the relevant elites and government officials are quite *knowledgeable* about these facts. Scenarios of this kind are a strategic nightmare to them that should be avoided by all means and at all cost;

3. *Losing conventional superiority*: In the event of atomic weapons acquisition by Iran followed by nuclear proliferation in the region – including Iran's neighbours – Iranian conventional superiority, which is founded upon elements including its conventional arms, population, vast surface area, geopolitical situation etc., would be weakened;

4. *Emergence of nuclear terrorism*: Apart from the risk of the possibility of an effort by other states to get nuclear arms, the prospect of extremist and terrorist groups gaining access to such weapons is another threat which is far more dangerous. Despite America's considerable geographical distance from al-Qaeda's headquarters and possession of sophisticated equipment to detect such weapons, it is clear that the threat of al-Qaeda and other radical terrorist groups potentially gaining access to nuclear weapons along the borders of Iran poses considerable danger to the Islamic Republic. In fact, both from a logistical and ideological viewpoint, the likelihood of the use of nuclear arms against Iran by radical groups is higher than such an attack on the US;

5. *Institutionalization of the American presence in the region*: Iranian acquisition of nuclear arms could lead to other countries in the region feeling threatened and cause them to become more closely aligned with the US. This could strengthen and stabilize the U.S. situation in the region. It is also possible that due to the way a nuclear-armed Iran would be perceived, regional states would move towards forming regional military alliances with or without the U.S.;

6. *Vulnerability to production and maintenance costs of nuclear arms*: Production and maintenance of nuclear arms requires considerable funds. High expenditure in this regard would be followed by a reduction in the performance in other sectors, leading to weakening of the economic potential of the whole country;

7. *Harming Iranian ties with some regional and international actors*: Iranian acquisition of nuclear arms could impact Iranian ties with some regional and international actors and have a detrimental effect on these relations. A perceived Iranian threat and risk could change the balance of relations at some levels and in some areas. The Gulf Cooperation Council (GCC) members have revised their security priorities and are moving towards modern arms procurement and strengthening their military capabilities due to their perceptions of an Iranian threat;

8. *Religious prohibition of the acquisition of nuclear weapons:* According to some interpretations of Islam, the production, stockpiling or use of nuclear weapons are forbidden on religious grounds. Thus, the Islamic Republic of Iran cannot in principle include acquiring nuclear arms as a goal within its atomic energy programme due to religious precepts. Based on such interpretations of Islam, weapons of mass destruction are incompatible with Islamic faith in Iran. The issue of the contradiction between the acquisition of nuclear arms and Islamic teachings has been repeatedly emphasized in explicit terms by the Supreme Leader of

the Islamic Republic, who has said: 'We believe that apart from nuclear arms, other types of WMDs like chemical and biological [arms] pose serious threats against humanity. Being a victim itself of chemical weapons use, the Iranian nation feels more than any other nation the risk associated with production and stockpiling of such weapons. And it is ready to use all its possibilities for countering them. We consider using such weapons as unlawful, and struggling to protect mankind against this great affliction as a universal obligation' (Ayatollah Khamene'i: 2010).

Conclusions

Iran has long supported the creation of a Middle East free of WMD and is fully committed to promoting a stable security environment in the region. The current impasse in the 5+1 dialogue with Iran does not change the latter's position that a zone free of WMD in the Persian Gulf and greater Middle East region is a desirable objective for regional security. Iran remains committed to the Nuclear Non-Proliferation Treaty (NPT) – signed and ratified by Iran in 1970 – as well as the Additional Protocols (AP) signed by Iran in 2003 and implemented voluntarily for more than two years. Thus, Iran would have no objection – in principle – to an agreement such as one formalizing a Middle East free of missiles and WMD if it enhances security for everyone. Iran's nuclear facilities are under such close surveillance that no regional arrangement can conceivably be more thorough or intrusive. In Iran's assessment, others have reason to be wary of such inspections. But such an agreement, should it ever transpire, could also be an important first step towards a more cooperative security arrangement between Iran, its neighbours and the Middle East as a whole.

The US and EU-3 (Russia and China have different views and policy objectives) must realize that their options are limited. A military strike on different nuclear sites in Iran, either by Israel or the US, will only convince Iran to pursue the weaponization of its nuclear programme; it will not destroy Iran's dispersed nuclear infrastructure. Furthermore, Iran is undeniably confident, due to the regional influence it wields and the potential instability that it is capable of creating in neighbouring countries. Considering international sentiments regarding Iran's nuclear programme, the creation of a zone free of missiles and WMD is a positive step towards diffusing tensions and building confidence, provided that the international community ensures that every member country agrees and complies with this proposal.

A related issue is Iran's missile programme remains. Asking Iran to stop or dismantle its missile programme would simply not work. Considering the missile attacks by Iraq during the Iran-Iraq war and the importance of missiles in defence policy, Iranian military planners are convinced that it is imperative for Iran to invest in missile research and development. Iran has successfully tested mid-range missiles, such as the Shahab-3 and the Sejjil. However, it is possible that Iran might be persuaded to cease developing longer-range missiles or to limit the deployment of its arsenals so that sensitive areas in Israel and Europe are not within their range. This would be a bargaining chip in a comprehensive deal to resolve disputes with the West and the United States. Iran and the West could agree on a verification regime to check and monitor missile deployments. It is conceivable that reaching agreements along these lines would serve as confidence-building measures.

Conceptualizing CSBMs Properly in the Delivery Vehicles Sector for the Middle East Conference

BERND W. KUBBIG[*]

The Case for Missiles at the MEC Table

This paper with its specific emphasis on delivery vehicles – and here again on missiles – makes the case for a number of conceptual, political, and procedural advantages that this category of delivery systems has for the planned Middle East Conference. Needless to say, delivery systems are explicitly mentioned in paragraph 7(d) of the Mandate for the MEC: referring there to the "full implementation" of the 1995 Resolution on the Middle East. While 'the other' weapons of mass destruction (WMD) comprise biological and chemical weapons, delivery systems or delivery vehicles (DVs) usually consist of missiles – ballistic and cruise missiles, of aircraft as well as of unmanned aerial vehicles; missile defence systems could also be included, since they are the 'technological twins' of ballistic missiles. It is taken for granted that regional asymmetries in the WMD/DVs area are a fact that has to be taken into account. These imbalances, therefore, are an additional challenge, but also an opportunity both for any Track II analysis such as this paper as well for the Middle East Conference itself.

Properly managed by Ambassador Jaakko Laajava and his team, missiles can contribute to the success of the prospective Helsinki Conference. In fact, missiles

- can be seen as the starting point from which it is possible to reach out to other means of delivery such as aircraft and make them part of the overall asymmetrical equation;

- (this may be even more important) can work as bridge builders to all three kinds of WMD – this applies to those types of missile which are designed to carry nuclear, biological, and chemical warheads (see next bullet point);

- can be introduced in line with the mandate. Based on the findings of the Routledge study.[1] I suggest dealing with missiles having a 70 km range or more because they can be verified (verifiability is also an advantage, especially compared to biological warheads). Such a 'red line' enables negotiators to leave conventional arsenals outside the Helsinki room, and thus, to reduce complexities at the nevertheless, if they wish the parties in Helsinki can, at a certain point in time, go beyond the state level and include the rocket/missile arsenals of organizations such as Hamas and Hezbollah – this will certainly complicate the discussions;

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[1] See Bernd W. Kubbig and Sven-Eric Fikenscher (eds), *Arms Control and Missile Proliferation in the Middle East*, London: Routledge (2012).

- if nevertheless wished by the parties in Helsinki, they can at a certain point of time go beyond the state level and include the rocket/missile arsenals of organizations such as Hamas and Hezbollah – this will certainly complicate the discussions;

- can be used at the MEC table as starting points for discussions and as test balloons to explore certain options, because missiles are politically less loaded than especially nuclear weapons;

- (this is especially relevant) are supposed to be part of a broader Helsinki agenda – although they may not constitute the most pivotal topic of debate, which could prove to be beneficial. This Having a more sweeping agenda in Helsinki also covering strategic missiles increases the chances for trade-offs and for bargaining chips and by implication for a compromise-oriented tit-for-tat approach. At the same time, the inclusion of all three categories of WMD and of DVs reduces the danger of singling out countries with an actual (Israel) or possibly emerging nuclear weapon capability (Iran). In line with the MEC Mandate, all results will be 'freely arrived at'– a stipulation that may provide an additional incentive for all Middle East states to come to Helsinki, since it underscores their sovereignty at the MEC table.

In a nutshell, missiles matter, because without them and other delivery vehicles nuclear, biological, and chemical warheads will, to a considerable extent, become sitting ducks.

While all this indicates that missiles can become part of the solution, they are first of all part of the problem: They are an element of an ongoing and in fact intensifying arms race. Because of their technical characteristics, they can be especially destabilizing in a crisis situation, since they cannot be called back. Missiles have been used in Middle East wars, and they are threatening the life-style of Israeli citizens who endure the rockets launched by organizations such as Hamas and Hezbollah.[2]

The Structure of This Paper

I proceed first by defining confidence- and security-building measures[3] (CSBMs) together with arms control, reductions, and disarmament.[4] This will allow us to lay down a gradual path forward in the areas of delivery systems on the way to the ambitious goal of a missile free zone as part of a much more comprehensive zone free of WMD/DVs as envisaged by the international community in May 2010. Confidence- and security-building measures will thus be understood as one element of an integrated and long-term concept. Secondly, I

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[2] I nevertheless will confine myself to the missile problem on the state level, and here for the reasons mentioned above to those with a range of more than 70 km. But it is important to note that the focus on missiles has allowed the authors of the Routledge study to include all relevant conflict formations, those on the non-state level included, in a feasible way. See Bernd W. Kubbig and Sven-Eric Fikenscher (eds), *Arms Control and Missile Proliferation in the Middle East*, London: Routledge (2012),p. 167-214.

[3] The terms CSBMs and CBMs (confidence-building measures) are used as synonyms. In the terminology related to the Conference on Security and Co-operation in Europe the added notion of 'security' (C*S*BMs) implies additional criteria. See on this Sven-Eric Fikenscher *et al*., The promise of military transparency. Building on East–West experiences and on the UN Register of Conventional Arms, in: Bernd W. Kubbig and ibid. (eds), *Arms Control and Missile Proliferation in the Middle East*, London: Routledge (2012), p. 218.

[4] In order to make things easier for the reader I will often reduce the three terms of 'arms control, reductions, and disarmament' to the first two elements.

conceptualize missile-related CSBMs as well as arms control/reductions as part of a conflict formation-centred approach. Missiles, like all other DVs or WMD, have to be seen primarily in the regional context. This approach has important implications for the – limited albeit relevant – role of all measures in addressing and even reducing and eventually eliminating those delivery systems and weapons of mass destruction.

My focus in this paper is one dyad only: among the many existing adversarial/inimical relationships in the Middle East the Israeli-Iranian one stands out because it is highly explosive. In fact, all elements of a gradual strategy striving towards a zone free of WMD/DVs currently have to be seen as escalation control/de-escalatory measures – speaking about CSBMs/arms control and reduction measures in this dyad actually amounts to efforts to *manage and decrease deeply rooted mistrust*. Such emergency measures are in part more basic and more modest than *building* confidence, although they are not mutually exclusive.

Because of the precarious relationship between Israel and Iran, I will lay my emphasis on urgent short-term measures. The medium- and long-term efforts on the way to the goal of a WMD/DVs Free Zone described elsewhere in greater detail[5] will be mostly neglected here; they are in fact sketched out in outline near the end of this paper. Two aspects need to be mentioned: first, CSBMs are part and parcel of this long, cumbersome, and gradual arms control and reduction path towards the planned zone; secondly, as I will explain below, far-reaching CSBMs and traditional arms control measures overlap. Therefore, for the Helsinki Conference to be successful, I suggest a flexible approach that keeps all CSBM and arms control and reduction options in principle on the table at the same time. Nevertheless, let us face the realities of the utterly precarious Israeli–Iranian dyad: it is hardly conceivable that arms control/reduction measures will be at the forefront at the beginning of the Helsinki discussions.

The guiding question for this paper is the following one: What specific tasks can missile-related CSBMs and arms control/reductions achieve, and which ones can they *not* fulfil?

My paper culminates in a proposal for this conference of the EU Consortium in Brussels to send a Track I or Track II surprise signal from here to the world by capping the range of those missiles which are seen by Israel and Iran as the most threatening ones, because they can reach the other side's territory.

Defining and Conceptualizing Missile-related Confidence- and Security-Building Measures

Defining the Basic Terms

Basically, confidence- and security-building measures aim at reducing the dangers of tensions and of armed conflict, but also the misunderstandings associated with military activities. The dimension of lack of clear and timely information, especially in crisis situations, is of special relevance. Therefore, military openness/transparency is a central element of the concept of CSBMs.[6] They are to lead to the 'reduction of uncertainty' '' with

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[5] See Martin Senn *et al*., Caps and bans: limiting, reducing, and prohibiting missiles and missile defence, in: Bernd W. Kubbig and Sven-Eric Fikenscher (eds), *Arms Control and Missile Proliferation in the Middle East*, London: Routledge (2012), p. 251-276. In this phased, long-term concept missile defense systems, which are ignored in this paper, are dealt with in great detail.

[6] See on this Sven-Eric Fikenscher *et al*., 'The promise of military transparency: building on East–West experiences and on the UN Register of Conventional Arms,' in ibid. and Bernd W. Kubbig (eds), *Arms Control and Missile Proliferation in the Middle East*, London 2012: Routledge, 218.

regard to general military escalation, crisis escalation, surprise attacks, and low-level violence.[7] Many confidence- and security-building measures are technical ones, but not necessarily weapons-related – the classical example being the 'hotline' established between the United States and the Soviet Union after the Cuban Missile Crisis. In the Middle East the CSBMs achieved (but not implemented) in the wake of the talks on Arms Control and Regional Security in the first half of the 1990s regarding maritime issues (search-and-rescue and incidents-at-sea); prior notification of military exercises and the exchange of information regarding, among others, military personnel; the establishment of a communication network in the Middle East and of three regional security centres.

There is some overlapping between CSBMs and arms control, since both aim at enhancing strategic stability; at the same time, arms control has a confidence-building orientation, although the tools are in part different. Indeed, arms control, too, aims at reducing tensions resulting from uncontrolled arms dynamics and from delicate crisis situations. Arms control measures are stability-oriented (arms race and crisis stability) and are characterized by their focus on tackling the destabilizing character of the respective weapons/delivery vehicles. Arms control initiatives are often cooperative ones in a bi- or multilateral setting; since they are stability-oriented in the first place; they can imply (and in fact have in reality in the East-West context) a coordinated ('controlled') build-up.[8] The concepts and measures for reducing those arsenals with the final objective of disarmament differ fundamentally from the instruments and the stability-oriented goals of classical arms control. Disarmament can take the form of a regional zone and include a broad range of categories (such as WMD and DVs), but it can also mean a 'global zero' concerning specific weapons (e.g. nuclear).

However, because of the specific history of proposals in the missile realm, the difference between CSBMs such as the non-deployment of certain types of missiles and the traditional arms control notion is not] clear cut. Such a distinction is in fact becoming more blurred. This applies also to limiting missile capabilities qualitatively (by constraints on 'modernization') or quantitatively (by, for instance, capping the range of missiles or reducing the number of delivery vehicles). Prohibiting the deployment of a certain missile type, amounting to a qualitative constraint, can be regarded as more restrictive than limiting numbers as part of traditional arms control.

Thus, confidence- and security-building measures differ in scope ranging from relatively simple/modest to ones which are far-reaching. Transparent information and communication measures fall under the first category. In the missile-related area they involve, for instance, the exchange of information on missiles projects, regular reporting on activities, and pre-notification of flight tests.

Far-reaching confidence- and security-building measures include limits on the striking range of missiles tested; moratoriums or even bans on flight tests; non-deployment, de-targeting and de-alerting of missiles; no first-use of delivery vehicles; restraint in missile technology transfer and development of indigenous capabilities; a moratorium/ban on

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[7] Yair Evron, Confidence- and Security-Building Measures in the Arab–Israeli Context, in: *Contemporary Security Policy*, 16: 1, (1995). p. 152-153 (quotation: 152).
[8] See Martin Senn *et al*., Caps and bans: limiting, reducing, and prohibiting missiles and missile defence, in: Bernd W. Kubbig and Sven-Eric Fikenscher (eds), *Arms Control and Missile Proliferation in the Middle East*, London: Routledge (2012), p. 253-255.

missile-related transfers.[9] Again, these measures touch upon the weapons themselves – an impact that is normally attributed to classical arms control measures.[10]

Therefore, which category of CSBMs is involved must be made clear. The concrete context will be relevant. Simple/modest measures can be extremely important in crisis situations involving countries such as Iran and Israel whose hostile relationships do not in all likelihood include any formal communication mechanisms.

Conceptualizing the Basic Terms

As far as conceptualizing CSBMs is concerned, this paper adopts the approach of previous works and builds on their results. This implies that the region is structured on a country/state-related level according to existing conflict formations and their associated alliances. Israel and Iran appear as two crucial centres which structure the state relationships both with their allies and mostly adversaries/enemies. In the case of Israel, with its 'special ally,' the United States, relevant countries include Iran, Syria, Egypt, and the members of the Gulf Cooperation Council; in the case of Iran, with its pragmatic ally, the Assad regime in Damascus, Israel would have to be added, and so would the United States. On the non-state level Hamas and Hezbollah can be considered adversaries of Israel and allies of Iran.

A forthcoming policy brief,[11] which in part summarizes previous studies, will present the following crucial results involving the most relevant state relationships in the Middle East: tensions of different degrees and conflict potentials ranging from low to extremely high/explosive. Also, among the weapons of adversarial/hostile countries some are seen as more dangerous than others – not surprisingly, (emerging) nuclear arsenals in first place, and within the spectrum of delivery vehicles those aircraft and missiles that can reach the territory of the adversary. Military doctrines – whether they are perceived as primarily or exclusively offensive or defensive – matter, too.

In addition to the identified lists of country-based security concerns/external threats as the most important driving force, that policy brief highlights the following motives and interests behind the weapons procurement strategies of the states analysed:

- the hegemonic aspirations of two states in the region (Iran and Saudi Arabia);
- the interest in not having foreign policy options constrained across the board (this applies to Israel especially vis-à-vis Iran) by a possibly emerging (near) nuclear power state;
- historical experience (Israel's experiences of the Holocaust and of its wars with Arab countries; and Iran's experience of receiving no support in the First Gulf War [1980-88], including the use of chemical weapons by Saddam Hussein);
- cultural factors (such as a strong inclination to self-defence in Israel and prestige and national pride associated with nuclear programs in the Islamic Republic); and finally

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[9] United Nations General Assembly, 61th session, *The issue of missiles in all its aspects. Report of the Secretary-General,* (New York, N.Y, July 20, 2006 [A/61/168]), p. 19.

[10] This is one reason why the strict sequencing of 'CSBMs first – arms control later' as a major hurdle for any serious talks – is in principle moot in the missile area. I will deal with this potentially explosive issue for the MEC in the extended version of this paper, since it mainly focuses on the Israeli–Egyptian dyad.

[11] Christian Weidlich and Bernd W. Kubbig (in Cooperation with Other Members of the Academic Peace , Orchestra Middle East), *Coping Constructively with Military Asymmetries in the Middle East. Lists of Security Concerns as a First Step at the Middle East Conference* (working title, forthcoming as a Policy Brief).

- domestic factors, i.e. public attitudes, power constellations, a network of the military, industry, bureaucracies and universities involved in the research, development, testing, and production of the relevant military capabilities (the latter applies in particular to Israel, and to a certain degree to Iran).

Two assumptions remain relevant:

- In principle, conflict formations are paramount in explaining state behaviour in the entire security area – this does not exclude the relevance of weapons and the need to control, reduce, and finally to eliminate them.
- The security concerns, motives, and interests that have been identified are stumbling blocks for any successful strategy – including CSBMs – tin connection with the zone as the key issue at the MEC. This explains why I start by putting the specific weapons – and CSBMs and arms control/reductions – into the overall bilateral contexts.
  The Iranian-Israeli relationship, with its emphasis on delivery systems, can be expanded at a later point in two ways: first, by including other important adversarial relationships; and second, by extending the DVs to nuclear, biological, and chemical weapons. In the Iranian–Israeli dyad the potential for expansion includes above all the United States and its relevant arsenals, since Tehran views Israeli and American capabilities as a joint threat that cannot be separated.

CSBMs as Escalation Control/De-escalatory Measures in the Israeli–Iranian Relationship

Embedding Missile-related CSBMs and Arms Control/Reductions in the Overall Bilateral Relationship

On *Israel*'s list of security concerns/threat perceptions regarding the Islamic Republic two factors loom large: first, Tehran's aggressive rhetoric and foreign policy, i.e. its support of a hostile regime (Syria) and non-state actors (Hamas and Hezbollah) are seen as part of an overall quest for Iran's regional hegemony; second, the suspected Iranian nuclear weapon activities and the obvious programs of missiles which can reach Israel.

The *Islamic Republic of Iran*, in turn, is afraid of an Israeli attack on its nuclear and missile facilities based on the 'Begin Doctrine' of pre-emption; Tehran is also concerned about the Israeli monopoly on nuclear weapons as well as about the superiority of its aircraft and of its missiles, which can reach Iranian territory. In a more specific way the elites in Tehran also fear (further) killing of its scientists. Yet whereas a (near) nuclear Iran is the paramount threat for Israel, from Tehran's perspective the United States – and not Israel – is the number 1 menace.

But their mutual fears do not explain the nuclear and missile activities of both countries. As indicated above in short-hand, for both Israel and Iran the motives and interests identified have to be taken into account, too – and to be overcome during the gradual strategy for achieving a zone free of WMD/DVs. Again, one specific difference is especially important: Whereas Iran has become the most important factor in Israel's recent arms build-up, Tehran's

activities in the nuclear and missile realm had nothing to do with Israel in the past and even today such activities are considered to be a secondary driving force.

The Israeli–Iranian relationship is characterized by absence of diplomatic ties and a lack of visible mechanisms of communication. At the same time, rhetoric and actions across the board are mutually antagonistic; they include technological cyberspace interventions and the alleged targeted killing of each other's citizens. All in all, the tensions between these two countries are extremely high, with an equally great escalation potential to more war-like violence – military strikes against Iranian nuclear and missile facilities and a violent, probably asymmetrical response by Tehran cannot be ruled out. For good reasons the current state of affairs has already been described as a bilateral multifaceted war with strong support on the part of Israel for even more intrusive international economic and financial sanctions against Iran.

Exploring the Relevance of CSBMs and Arms Control/Reductions in the Missile Realm

What specific tasks can missile-related CSBMs and arms control/reductions achieve and which ones can they *not* carry out?

First of all, the pre-war or war-like situation between the two countries warrants every effort to improve the dyad 'on all fronts.' Flexible and simultaneous steps will be imperative, and they may be designed as mutually reinforcing offers. The Three Milestones (see below) should be understood in this way – depending on the situation, elements of all three Milestones, for instance, can be launched as test balloons and be put forward in parallel. I trust that the experienced facilitator and his team at the MEC table will be skilled in selecting and proposing suitable specific measures.

In line with the assumed paramount importance of conflict formations for arms dynamics, major initiatives will have to be taken in the policy field and in the entire military area. The Iranian-Israeli relationship can basically and generally be improved by parallel steps involving initiating bilateral dialogue on all levels (Track I, 1,5 and II), increasing public awareness of the military dangers and ceasing to use bellicose rhetoric. Special emphasis should be put on initiating mechanisms of communication (hot wire). Informal signalling possibly via third parties (Switzerland, Norway or by Track II organizations) and behind the scenes is especially important for a start.

In the military area additional steps could include risk reduction and strategic restraint across the board, safety and security measures plus improvement of intelligence. As missiles are part of the basic bilateral problem, there is a – limited and yet relevant – role for CSBMs and arms control/reductions. In the current bilateral crisis situation de-escalatory steps are urgent, but (as indicated in the Three Milestones approach below) this does not at all exclude mid- and long-term initiatives on the long and rocky road to a Missile Free Zone as part of the broader WMD/DVs Free Zone which the international community envisaged in May 2010.

CSBMs in the missile area can endorse these goals, and also fulfil specific ones – but it would be too much to expect them to fundamentally change the Iranian-Israeli relationship in all its dimensions. This applies to all measures related to all other DVs and WMD as well. In fact, CSBMs in the missile area can

- signal good will based on a courageous leap of trust (see concretization in the next sub-chapter);
- help start dialogue on the WMD/DVs Free Zone not only at the Middle East Conference but also by making use of other already existing forums ("First Milestone"), for instance in the context of the
  - o United Nations. Its Register of Conventional Arms (UNROCA) is a fruitful starting point for establishing a certain degree of military transparency in the context of military asymmetries, since it covers both categories: missiles and aircraft. In the past the register was in principle supported by almost all states in the region, Israel and Iran included.
    The UNROCA only lists imported items, and therefore needs to be revised and expanded. But it should cover all stockpiles of conventional military capabilities and procurement from each country's own production. Unmanned aerial vehicles need to be included as well. In principle, the revised UNROCA can create the political will needed to embark on the gradual reduction path towards a Missile Free Zone as part of a more comprehensive WMD Free Zone. But ironically, Israel and Iran are in the same boat, since they are the only states in the region with an indigenous military production capacity. It remains to be seen whether the required reforms produce a kind of glue effect between the two countries.

  - o two existing missile regimes ("Second Milestone"), i.e. first, the Hague Code of Conduct Against the Proliferation of Ballistic Missiles (HCoC), whose 134 member states are only required to annually report their missile and space activities as well as to notify other countries before they test a missile or launch a space vehicle. The potential for taking these two minimalist requirements seriously *and for expanding them* is gigantic. Ironically, the weakness of the HCoC could be attractive for the missile-relevant Middle Eastern/Gulf countries, none of which is a member. If Israel and Iran joined the HCOC they would show that regional cooperation is possible in the security sector. But even accepting its two stipulations without joining it formally would contribute to confidence building.

  - o Second, the Missile Technology Control Regime (MTCR) and its export controls. They can reduce incentives for proliferation in the future too if the member states abandoned the 'my missiles are good, yours are bad' attitude. In addition, the MTCR members should reward good missile behaviour with increased technical cooperation in the space sector. The states in the Middle East/Gulf, which so far have only undertaken minor missile transfers within and outside the region (above all Israel), may want to subscribe to the controls of the MTCR without formally joining it. In fact, a regional MTCR variant is recommended. The optimal way would be if Israel and Iran were inspired by other states of the region to join them in this respect.

A Track I or Track II Surprise Signal from Brussels to the World: Capping the Range of the Most Threatening Missiles

Offering the concrete step of an informal understanding or bilateral agreement about capping the ranges so that Israeli and Iranian missiles cannot reach the territory of the adversary would constitute a tremendous CSBM; relocating the missiles in Iran only because of its vastness could also be a promising step. The same applies to the third proposal: de-alerting the regional strike forces of both sides, i.e. keeping the launchers/aircraft separately from the strike weapons (this measure would bring the United States into the picture).

The first initiative, in particular, would be a far-reaching one. Such a move should be seen in the context of the above-mentioned advantages associated with the Mandate for the MEC in Helsinki: first, the greater chance for trade-offs among missiles, aircraft, unmanned aerial vehicles, and missile defence systems; second, the promising procedural principle 'give a little, take a little'; also, constructive results can be expected from a formula that is 'freely arrived at' under the MEC Mandate.

As a unilateral step taken, for instance, by Iran, it could be perceived by Israel at first glance as a diversionary tactic or as just another gesture of typical Iranian 'over-transparency' (Uzi Rubin). Needless to say, an adequate verification scheme would have to be put in place. Tehran may have its reservations, too, involving the Israelis acting first. As the comprehensive list of the two countries' current missile (defence) capabilities (see Table) shows, Israel is superior across the board. The gap widens if attention is expanded from the DVs to the WMD realm because of Israel's nuclear monopoly in comparison with a possibly emerging (near) nuclear Iran.

Nevertheless, Tehran has the potential for bargaining power. This is due to the fact that Israelis perceive Iranian medium-range missiles (Shahab-3; Sajjil/Sajjil-2) as a threat because they can reach Israeli territory (the short-range and probably the long-range missiles are not important in this dyad).

This specific capping option cannot be seen in isolation from the entire spectrum of delivery vehicles. Israel is superior in that both its sea-launched cruise missiles as well as some of its multi-role fighters can reach Iran. Tehran would be imprudent if it did not factor this asymmetry into its missile bargaining. Therefore, the Iranian leadership could offer a cap for a certain number of its medium-range missiles. To achieve tangible results, Israel would have to respond within a strategy of mutual responses in a productive, asymmetrical way that would include (some of) its aircraft.

In any case, such a surprise signal could be explored at the Track II level first, thus demonstrating the greater freedom over Track I – the Iranian and Israeli participants in this very panel may want to endorse the signal publicly. In fact both panellists from Israel and Iran could use this conference of the EU Consortium to give greater exposure to this surprise signal.

Table: Identifying Trade-Offs and Bargaining Opportunities in the Context of Military Asymmetries Between Israel and Iran in the DVs Area[12]

		Israel	Iran	Assessment
Ballistic Missiles	short-range	+	–	Advantageous/superior position for Israel
	medium-range	+ –	+ –	**Rough Parity (favourable condition for bargaining)**
	long-range	+	–	Advantageous/superior position for Israel
Cruise Missiles		+	–	Advantageous/superior position for Israel
Unmanned Aerial Vehicles		+	–	Advantageous/superior position for Israel
Missile Defence		+	–	Advantageous/superior position for Israel
Aircraft		+	–	Advantageous/superior position for Israel

Source: Based on Michael Haas and Bernd W. Kubbig (Compilers), "'Appendix: the arsenals of actors relevant to a missile free zone in the Middle East/Gulf,' in: Bernd W. Kubbig and Sven-Eric Fikenscher (eds), *Arms Control and Missile Proliferation in the Middle East,* London 2012: Routledge (no pages indicated)

Mid- and Long-term Measures

- The steps described above would basically constitute Phase 1 of the 'Third Milestone' which is a stabilization phase, since build-ups in terms of traditional arms control cannot be ruled out. The two phases that would follow on the long road to a missile free zone as part of the more demanding zone free of WMD/DVs can be sketched in the following way:

- *Phase 2:* A reduction and prohibition both of offensive weaponry as well as of so-called defensive weapons would be pursued. Missile defence is basically not 'purely defensive.' Our argument is that reductions in weaponry and greater stability can be pursued and achieved in tandem.

- *Phase 3:* Comprehensive bans would be in place along with a Missile Free Zone. There would be two major challenges to cope with: First, effective verification measures which would have to be far-reaching and sustainable would have to be applied in order to deter and detect potential cheaters and to reassure those abiding by the regime. Second, certain safeguards, excluding missile defence, would be required in order to prevent a reversal of commitment and capabilities in crisis times.

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[12] Quantitative and qualitative parameters to be provided in later version for which the WMD-related dimension will have to be included, too. And so will the much more important assessment of how important missiles are within the arsenals and the doctrines of both countries.

As unrealistic as these phases may appear from today's perspective, they would be necessary elements of a comprehensive and long-term concept which right now has to focus on the escalation control/de-escalatory measures presented, in order to avoid war between Israel and Iran – or, to end on a more optimistic note: to introduce them as steps that are deserving of the name confidence- and security-building.

The Way Ahead

This paper has made the case for the added value of missiles and CSBM/arms control and reductions in this area as part of a long-term path towards the ambitious objective of a zone free of all weapons of mass destruction and of all kinds of delivery vehicles. This amounts to underscoring the wisdom of the Mandate for the Middle East Conference whose expanded agenda allows for greater trade-offs and bargaining opportunities which imply a compromise-oriented approach with terms concurrently fulfilled by each party.

While probably not being at the centre of the Helsinki discussions, delivery vehicles would be attractive, because they are politically less loaded. Experience in this area may have a positive spill-over effect to the debates on weapons of mass destruction, especially nuclear warheads. Reducing delivery vehicles will finally increase the chance of solving the WMD issues, since they transport the lethal payload to the territory of adversaries.

CSBM and arms control/reduction need to be embedded in the regional context. The focus of this paper on the Iranian–Israeli dyad will have to be expanded by analysing all relevant state relationships and by including nuclear, biological, and chemical weapons. In addition, transparent criteria for measuring the military asymmetries will have to be developed.

After all, conceptualizing CSBMs as part of a long and rocky road to the extremely demanding goal of a zone free of WMD/DVs and the zone itself are a tool – not ends in themselves. They would increase security for all in the region. Therefore, it is necessary and helpful to involve external actors – especially the United States – in the process of establishing more comprehensive security arrangements.

Missiles and Other Means of Delivery in the Middle East

UZI RUBIN*

Introduction

For nearly one hundred years the Middle East has been a region of conflict marked by wars, confrontations and social upheavals driven by religious, ethnic and economic factors. Ever since the outbreak of WWI there have rarely been periods of tranquility. Conflict has been endemic, ranging from civil wars to intrastate wars and foreign invasions. During the Cold War, the region played a key role in the US–USSR confrontation. Today its political evolution is dominated by three great processes: The rise of the Islamic Republic of Iran, internal upheaval in the Arab world (the Arab Spring), and the century-long Israeli–Palestinian conflict. The natural wealth of the region – which contains about one half of the world's proven oil reserves – is amplifying local confrontation into global crisis and fuels the flood of armaments imported into the region from the outside or manufactured by its more industrially advanced states.

In this somber reality, 'confidence' and 'the Middle East' may well be regarded as contradictory terms. The major factors that contribute to this almost permanent crisis situation are cultural diversities, clashing national and religious aspirations, and naked fear. In the last category, perhaps the most fearsome factor is the widespread availability of delivery systems that can strike civilian populations from a distance, whether with (highly lethal) non-WMD or with WMD bombs and warheads.

This paper will review the technological history of delivery platforms at large, their spread and use in the Middle East, and their contribution to threat perception. Based on the insights from this review, the paper will strive to point out the most realistic path for confidence-building measures.

For the purpose of this paper, the Middle East is narrowly defined as the region bound to the east by Iran's eastern borders, to the west by Libya's western borders and to the south by Egypt's and Libya's southern borders. Important players such as Turkey and key regions such as Afghanistan, Sudan and the important Arab states of the Maghreb are thus unfortunately left out, not with complete justification but in favour of clarity and conciseness.

Historical Background

When the French aviator Louis Bleriot crossed the English Channel with his fragile, wire-braced airplane in 1910, he unwittingly launched a veritable revolution in military affairs. Even in those early times, astute observers could see that cities and countries, hither to secure from bombardment by virtue of their distance from the battlefield, were destined to be

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vulnerable to bomb-carrying descendants of the primitive Bleriot Flyer. And indeed, WWI saw the birth of strategic aviation, first with lighter-than-air vehicles ('Zeppelins'), then later with rugged, multi-engine and fairly reliable bombers that wreaked havoc on central London and killed hundreds of civilians.

The explosive growth of aeronautic sciences between the world wars brought about the creation of bomber fleets as strategic weapons that heavily influenced the international politics of the era. The warning of Britain's Prime Minister that 'the bomber will always get through' reverberated in the public's awareness and created mass panics such as the partial evacuation of London on the outbreak of WWII. In this way the bomber aircraft foreshadowed today's fear of ballistic missiles.

Strategic bombers were the prime delivery platforms during WWII as well as in the later conflicts in Korea and Vietnam. From the fleets of B-17s and Liberators raining bombs on Berlin to the fleets of B-52sraining bombs on Hanoi, the strategic bomber reigned supreme. It devastated London and Coventry, Rotterdam and Berlin, Tokyo and Osaka, killing millions of civilians with non-nuclear weapons. It killed hundreds of thousands in Hiroshima and Nagasaki with nuclear ones.

Yet, as in any other human endeavour, challenges beget responses. Growing German air power compelled Britain to develop the first integrated air defence system, which saved her from defeat in the Battle of Britain. Germany followed suit when British and US bombings achieved an intolerably destructive level. When British airspace became too lethal for continued operation by the German Luftwaffe, the Germans turned to unmanned systems and developed the V1 'flying bomb' – essentially the first cruise missile – and the V2, the precursor of all subsequent ballistic missiles and space launchers. Both types were equipped with powerful high-explosive warheads and used as terror weapons against British and continental cities, killing thousands. While they failed to change the course of WWII, they were harbingers of the future.

Another harbinger of the future emerged at the same time from the Soviet Union, which due to its difficulties in high-volume production of artillery pieces at the onset of WWII, pioneered the use of self-propelled artillery shells – the first modern artillery rockets –to devastating effect. Thus was born the famous 'katyusha' weapon whose descendants still terrorize population centres from Kabul, Afghanistan to Beer Sheba, Israel.

With WWII over, both the US and the Soviet Union were quick to cash in on captured German technology and expertise, racing each other in fielding ever more capable and longer-range ballistic missiles. From a few hundred kilometres immediately after WWII, ranges grew to more than one thousand kilometres in the early 1950s and reached intercontinental ranges of more than 5,000 kilometres by the end of that decade. The ballistic missiles of the era were too inaccurate at such ranges to have any effect even against population centers unless fitted with nuclear warheads. This was quickly achieved by both superpowers, and by 1962 nuclear ballistic missiles were the epicenter of a war-threatening global crisis when the Soviet Union surreptitiously deployed them in Cuba.

With the ascent of nuclear Intercontinental Ballistic Missiles (ICBM) as the mainstay of strategic deterrence, the question of their survivability against a first strike became crucial. This was solved by various methods: By sheltering them in heavily reinforced silos that could withstand nuclear explosion close by, by deploying them on mobile Transporter Erector Launcher (TEL) vehicles, and by adapting them for underwater launch from ocean-going submarines (In their maritime use, they are denoted as Sea Launched Ballistic Missiles (SLBM).

The high cost and questionable accuracy of ballistic missiles compelled military designers to seek more accurate as well as cheaper nuclear delivery platforms. The German WWII invention of the cruise missile – a small, fast flying unmanned aircraft was thus revived and modernized.[1] Tiny but highly fuel efficient jet engines provided extended ranges, and an ingenious terrain navigation system (TERCOM) provided accuracy that surpassed manned bombers. The first modern cruise missiles were perfected in the US by the early 1970s and quickly emulated by the Soviet Union. In spite of their relatively slow speed (equivalent to that of passenger aircraft), cruise missiles can penetrate modern air defences by virtue of their small size, unpredictable flight path and nap-of-the-earth low altitude flying. Their load-carrying capability is significantly lower than that of ballistic missiles, but nuclear warheads have by now become small and light enough to be fitted on them.

Nuclear ballistic missiles have been and still are the mainstay of strategic deterrence and as such they are central in public awareness and non-proliferation efforts. Yet ballistic and cruise missiles with non-WMD warheads have been playing a growing role in worldwide confrontations. Used against large cities, non-nuclear ballistic missiles were as lethal in the 1980s as they had been in WWII, killing thousands of Tehrani residents in the Iran–Iraq 'War of the Cities. 'The incessant march of technology recently produced cheap, widely available yet accurate navigation systems, mainly through satellite systems such as GPS and GLONASS but also by the perfection of miniature, solid state sensors.[2] This closed the accuracy gap between aircraft and missiles: modern ballistic missiles can be made as accurate as manned aircraft and cruise missiles. Consequently, non-nuclear ballistic missiles such as the potent Russian SS26 'Iskander' are starting to complement and may replace classic airpower as part of the general trend of robotizing the contemporary battlefield.

In a parallel chain of events, the simple, unguided 'katyusha' of WWII evolved into modern artillery rockets (or in short, 'rockets') that combine low cost and high firepower with simplicity of operation and maintenance. As such, it became prevalent worldwide, with most armed forces operating one or another type of this class of weapon. For the same reasons of availability, low cost and simplicity they became the weapons of choice for terrorist organizations and non government militias. Rockets have been steadily growing in range and now have a range of hundreds of kilometres. Since, at such ranges, unguided rockets are extremely inaccurate, military designers have recently combined them with newly available precise, ultramodern navigation and control systems. The result is the 'guided rocket' – a relatively cheap but potent guided weapon that can be even more accurate than a true ballistic missile. This is further accelerating the trend towards replacing traditional airpower with tactical strikes.

The growing potency of ground-based air defences has compelled the development of another class of weapon – the Unmanned Air Vehicle (UAV) – mainly to penetrate defended air spaces, initially for reconnaissance and later on for strike missions. While UAVs are essentially remotely piloted or self-piloted multi-mission aircraft, designed to be used over and over again, there is no obstacle (except cost considerations) to equipping them with

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[1] This should not be confused with modern anti-ship missiles which are almost invariably designed as small self-piloted aircraft, and are often called 'cruise missiles'. Anti-ship missiles are designed to home in on and hit moving ships, and are usually incapable of navigating by terrain features and hitting a pre-selected impact point unless significantly modified. For the purpose of this paper, a 'cruise missile' refers to an unmanned self-navigation ground attack aircraft.

[2] Modern handheld smart phones and tablet computers have built-in miniaturized sensors and satellite navigation device like these, albeit with intentionally low accuracy.

warheads and sending them on one-way 'suicide' missions – as improvised, not entirely cost effective but viable 'ersatz' cruise missiles.

Finally, manned combat aircraft can be transformed into unmanned, remotely-piloted UAVs by installing remote controls. Such modified combat aircraft are usually used as targets for target practice by air and ground defences; nevertheless, they can be easily used for ground attack on one-way missions.

Today delivery platforms can be categorized as follows:

- For nuclear delivery: Manned aircraft, ballistic missiles of all ranges and cruise missiles
- For non-nuclear delivery: Manned aircraft, modified combat aircraft, ballistic missiles of short and medium ranges, cruise missiles, UAVs, unguided and guided rockets.

Delivery platforms in the Middle East

Upon achieving independence or semi-independence after WWI, most Middle Eastern countries established national armies and air forces. By 1948, Egypt's air force already included a small contingent of improvised bombers that participated in the Israeli–Arab war of that year to some effect. On its side, Israel quickly developed a potent air force that initially included bomber aircraft but that later on grounded them in favour of multi-role combat aircraft. Other counties such as Egypt and Iraq maintained manned bomber fleets which – equipped with Soviet-supplied (TU 16) jet bombers up until the early 2000s –played an insignificant role in the Israeli–Arab wars of 1967 and 1973. Soviet supersonic TU 22 manned bombers were acquired by Libya and Iraq, playing a small part in Sahara region fighting by the former, and a major role – including devastating raids on Tehran –during the Iran–Iraq war by the latter. No air force in the region today operates manned bombers; instead, multi-role strike fighters are prevalent: Iran and Syria operate the Soviet-era Sukhoi 24 while Israel deploys the F15I systems. Interestingly, there was one recorded case of the fielding of an unmanned version of combat aircraft for attack missions, and that was by Saddam's Iraq.

Indigenous cruise missiles started to appear in the region only recently. In 2010, Iran unveiled the 'Karar' system which is essentially a modified drone (i.e. a small unmanned aircraft used for target practice by ground-based air defence), with an advertised range of 1,000 km. More recently, in September 2012, Iran announced (but did not unveil) a 2,000 km cruise missile called 'Meshkat,' most probably based on the Soviet-era air-launched KH55 3500 km cruise missile, examples of which were smuggled by unknown persons (probably acting for Iran) from Ukraine in the 1990s. No combat use of those or any other locally made cruise missiles has been recorded to date. At the same time, non-nuclear cruise missiles were copiously used to devastating effect against military targets by the US in the 1991 Gulf War as well as in the opening phase of the 2003 Iraqi war. While causing some collateral casualties among civilian populations, their inherent accuracy apparently prevented substantial civilian losses.

Israel was the first country to introduce reconnaissance UAVs into the region, using them effectively in the 1982 (First) Lebanon War. As far as is known, its very advanced UAV fleet is not used as 'ersatz' one-way cruise missiles. Iran followed suite after the Iran–Iraq War showed the need for this type of system. Today it manufactures and deploys a large variety of

indigenously designed UAVs, mostly for reconnaissance but also, according to some reports, for ground attack. Iranian UAVs were supplied to Syria and Hezbollah, the latter making the only recorded use to date of UAVs as one way 'ersatz' cruise missiles during the 2006 (Second) Lebanon War.

Ballistic missiles were introduced into the region when Egypt embarked on the development of an indigenous family of short- and medium-range ballistic missiles in the early 1960s. When this effort failed, it purchased Scud-Bs from the Soviet Union and used them (on a very small scale) during the 1973 Israeli–Arab War. Subsequently, all the Soviet clients in the region acquired ballistic missiles, overwhelmingly of the Scud-B type but in one case (Syria) also of the battlefield type (SS 21). Following the defeat of its air force in the 1982 (First) Lebanon War, Syria purchased a large number of Scud-Bs from the Soviet Union and later the longer range versions, Scud-C and Scud-D from North Korea, equipping some of them with chemical warheads. It also built its own self-capability in the design and manufacturing of ballistic missiles and guided rockets. Today it operates at least three types of the former and one type of the latter, with an arsenal estimated at several hundred units. According to some reports, Syria transferred some Scud variant ballistic missiles to the Lebanese Hezbollah, and has definitely transferred its own developed 'Tishrin' 300 km guided rocket to that organization.

Iran first acquired ballistic missiles from Libya and Syria during the Iran–Iraq War in the 1980s, subsequently establishing its own design and manufacturing capabilities with North Korean and probably also with (probably unofficial) Russian and Chinese help. Today Iran is the foremost missile country in the Middle East, with its missile force playing the declared role of one of the country's prime strategic strike forces. It is also the second Middle Eastern country – after Israel – to orbit its own satellites by its own developed and manufactured Space Launch Vehicles (SLVs). It fields at least four types of ballistic missiles (with a fifth one and a suspected sixth one in development) as well as at least two types of guided rockets. Its arsenal of ballistic missiles and guided rockets of all ranges is estimated to number more than 1,000 weapons.

A total of six countries in the Middle East operate ballistic missiles and/or Space Launch Vehicles (two more – Iraq and Libya – were disarmed of their ballistic missiles in differing circumstances). Ballistic missiles have been used on several occasions against civilian populations. The most notorious case was the War of the Cities in 1988 when hundreds of missiles were fired by Iran and Iraq against each other's major cities, causing significant loss of life. No less notorious was the use of ballistic missiles by Saddam Hussein in 1991 against Saudi Arabia and Israel, fortunately causing relatively few casualties. A more obscure case of ballistic missiles in action was in the 1995 Civil War between North and South Yemen, in the course of which both sides fired missiles at each other's major cities, causing dozens of fatalities in the capital city of Sana'a. Another almost forgotten case was the extensive use by Iran of its Scud missiles against Iranian opposition camps in Iraq during the 1990s. The recent Libyan civil war saw the firing of a few Scud-Bs, with no known effect.

Unguided rockets reached the arsenals of most Middle Eastern armies in the course of the 1950s arms races. Their first recorded use as terror weapons was in 1979 when the Palestinian Liberation Organization (PLO) started firing them from Jordanian territory at Israeli population centers. After the PLO moved its centre of operation to Lebanon, it continued and intensified its rocket attacks on Israel's northern cities and villages. After being ousted from Lebanon, the PLO was replaced by Hezbollah who launched its own protracted rocket campaign against Northern Israel, reaching its destructive zenith (to date) in

the 2006 (Second) Lebanon War, when 43 Israeli civilians lost their lives during a month-long rocket assault.

Rockets have been and still are extensively used in Middle Eastern conflicts. Iraqi insurgents used rockets against British and US installations, causing collateral losses in civilian populations. Rockets are being used in the Yemen by the Al-Qaeda factions there against government forces and local populations. By far the most innovative use of rockets was made by Hamas in Gaza, adapting amateur rocket technologies to build their own homemade(but nonetheless deadly) rockets for bombarding villages and towns in southern Israel. This is still going on at the time of writing, albeit sporadically.

The Role of Delivery Platforms in Shaping National Security Policies

In the course of the huge military build-ups in the region between the 1950s and the 1980s, almost every player invested heavily in air power as its main strategic arm. This pattern changed to some extent on the establishment of the Islamic Republic in Iran. In contrast to the previous imperial regime, today's Iran regards its missiles – rather than its manned combat aircraft–as its foremost strategic arm. Syria seems to be following suit and has adopted a missile-centric defense policy after the defeat of its air force in the 1980 (First) Lebanon War. Both countries now possess large and growing arsenals of indigenous ballistic missiles and rockets.

All the same, Western-equipped Middle Eastern nations including Saudi Arabia, Egypt, Jordan and Israel continue to regard their manned combat aircraft fleets as their major strategic arms and frequently modernize them at great cost.

Non-governmental armed factions such as Hezbollah, Hamas, Islamic Jihad and other radical organizations rely on rockets as their primary strike forces, since they have no capacity to employ any other delivery platforms except suicide bombers.

While global concern is firmly fixed on nuclear-capable delivery platforms, within the Middle East itself concerns still overwhelmingly revolve around non-nuclear delivery platforms. The losses and damage from non-nuclear missile attacks in the various conflicts surveyed above are still fresh in the minds of constituents and leaders alike. The terror of simple rockets in the south of s Israel is threatening to unleash major military operations with their inevitable civilian casualties. Israel's public is highly concerned about non-nuclear missile strikes from Iran and Syria. Any concern about nuclear delivery platforms is still vague and not (yet) a major factor in shaping policy. This divergence between exogenic and endogenic perceptions is a source of not inconsiderable errors by outside analysts.

Prospects for Confidence-building Measures

Recommendations for arms controls and confidence-building measures are frequently based on a conscious or unconscious distinction between nuclear and non-nuclear delivery platforms as well as between aircraft and missiles. Consequently, they tend to focus exclusively on one dimension of the issue: that of nuclear-capable missiles. As we have seen above, such distinctions hardly apply in the Middle East, where threat perceptions encompass manned and unmanned platforms capable of delivering both non-nuclear and nuclear payloads. Comprehensive approaches that deal with all types of platforms might seem more logical but would actually be less realistic. Since most of the delivery platforms in the region

are dual purpose, chances that countries would agree to put any limitation on their utilization are close to nil. And since threat perceptions in the region are mainly about non-nuclear threats, it is hard to see how nuclear-related CBMs could change them.

Perhaps the only fruitful prospects for CBMs would be in the declarative and behavioural areas. It is not merely the existence of the weapons that creates a permanent sense of crisis – this atmosphere is aggravated by the way they are continually brandished in disclosures, demonstrations and widely advertised testing. It may well be that the most useful and at the same time not too unrealistic CBMs could be in the public domain: To curb excessive public glorification of delivery platforms and make them less alarmist and thus less disturbing to constituents and leaders alike.

Curbing Missile Proliferation in the Middle East: Options for a Comprehensive Policy

BRUNO GRUSELLE[*]

Taking the development of ballistic missiles into account is becoming a priority

The dissemination of weapons of mass destruction and their means of delivery is a fact which could lead to a dramatic increase in threats to international security. The nuclear crisis in the Middle East could escalate to such a level that the existence of a large arsenal of ballistic and cruise missiles could actually provoke a full-blown war from a limited incident or crisis.

In the area of missiles, the development of more efficient, longer-range weapons is gaining pace as illustrated by the attempted (but failed) launch in April 2012 of a Taepodong-2 from North Korea. The fact that the Democratic People's Republic of Korea paraded what appeared to be mobile ICBMs – whose operational state was later the questioned by several experts – demonstrated how important longer-range missile capabilities appear to be to this type of regime.[1]

But Pyongyang is also in possession of a large ballistic missiles arsenal mainly comprised of Scud type missiles as well as longer-range systems.[2] According to some assessments, North Korea is said to today possess between 300 and 400 Scud-B and Scud-C missiles as well as 60 mobile launchers deployed north of the demilitarized zone and capable of reaching most of South Korea and in particular Seoul. Moreover, worst case assessments give North Korea a total capability of about 200 Nodong missiles and some 10 to 15 mobile launchers.[3] More disturbing is the willingness of Pyongyang to procure such weapons for literally any state willing to pay for them. Its cooperation with Syria and its assistance to Iran's Shahab program must be considered one of the most worrisome trends in missile proliferation today.

Indeed, Iran's missile program has reached an unprecedented level of both sophistication and size for a proliferant country. Tehran is reported to possess a tactical arsenal comprised of several hundred Shahab-1 and Shahab-2[4] – equivalent to Scud-B and Scud-C[5]. The quest for longer-range systems reportedly started at the beginning of the 1990s with support from

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[1] North Korea 'missiles' at parade were mock-ups: experts, in: *AFP,* (24 April 2012).

[2] Joseph S. Bermudez, A History of Ballistic Missile Development in the DPRK, in: *CNS Occasional Papers* N° 2, (1999), p.11-18.

[3] General B.B. Bell, Commander US Forces Korea, Statement before the Senate Armed Services Committee, (7 March 2006), p.7.

[4] The International Institute for Strategic Studies, *Iran's Ballistic Missile Capabilities: A net assessment,* (2010), p.117.

[5] The average production rate of Scuds in Iran is reported to be 3 missiles a month and to have started somewhere in 1988. As detailed in the IISS 2010 paper, it is unlikely that Iran is fully capable of producing all components and it thus still depends on its cooperation with the DPRK.

North Korea. The first flight test of the 1,300 kilometre range Shahab-3 in 1998 started a long series of tests and the official deployment of the missile in 2003.[6] It has also conducted the development of modern anti-ship cruise missiles, culminating with the announcement by Teheran of its anti-ship cruise missile tests in spring 2004 and again in 2007 and in 2011.[7]

Iran has also invested heavily in the development of long-range, solid-propelled missile capabilities culminating in two tests conducted in 2008 and 2009 of a two-stage system called Sajjil. It is, however, possible that the program was held back by several incidents including the destruction of the Bid Ganeh site in November 2011 where General Hassan Tehrani Moghaddam – head of the solid propellant program – and some of his staff were killed. The important efforts made by the international community to enforce the sanctions decided by the United Nations Security Council resolutions targeting Iran's missiles programs (UNSCR 1747 (2007), 1803 (2008) and 1929 (2010)) could also account for difficulties Tehran may have encountered.[8]

Other states in the region possess or develop ballistic missiles. Saudi Arabia, for instance, received 2,500 km range liquid-propelled Dong Feng-3 from the People's Republic of China in 1987. Although these systems are now considered as non-operational due to the lack of proper maintenance and extreme storage conditions – detrimental in particular to the liquid propellant – they represent a unique ballistic capability in the region.[9] For some time, it has been rumoured that Saudi Arabia is negotiating with China for the replacement of these systems with a more modern solid-propellant ballistic missile. Most analysts suspected the discussions were centred on the acquisition of the shorter-range, more accurate DF-15B. Recently, news filtered out that Beijing had given a basic answer to the procurement of the solid-propellant DF-21. Several versions of that missile exist with ranges in excess of 2,000 km.[10]

Israel also possesses a large ballistic missile arsenal and capabilities. The Jericho family of solid-propellant, road-mobile ballistic missiles has recently grown to include a weapon with a range greater than 4,500 km, the Jericho-3.[11] The system, which was flight tested as recently as November 2011 and which was said to have been deployed in 2008, could have its range extended to become the first Israeli intercontinental ballistic missile.[12] That possible evolution of the range has spawned many questions concerning the final objective of Israel's ballistic missile arsenal.

Whatever the virtues of arms control are, one has to conclude from analysis of today's ballistic missile arsenals that the threat is very real and that there are only limited means available today for curbing it. Furthermore, everything tends to demonstrate a dramatic acceleration in the spread of missile weapons. Several trends are particularly worrisome:

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[6] Iran's missile show for domestic audience, in: *Asia Times*, (24 July 2003).

[7] Iran mass producing anti-ship cruise missile, in: *AFP*, (5 January 2012).

[8] International Institute for Strategic Studies, Iran: Sanctions halt long-range ballistic missiles development, in: *IISS Strategic Comments,* Volume 18 – Comment 22, (July 2012).

[9] Jeffrey Lewis, *Saudi Missile Claims*, (8 June 2010).

[10] Saudis are buying nuclear-capable missiles from China, in: *Debka Files,* (4 July 2012).

[11] Duncan Lennox (ed.), *Jane's Strategic Weapons Systems*, Issue 50, Surrey: Jane's Information Group (January 2009), p. 85-6.

[12] Israel launches new missile that can reach New York and Tokyo, in: *Pravda,* (3 November 2011).

- The rapid increase of short- to medium-range systems, not to mention very short-range rockets – less than 100 kilometres – such as the almost 4,000 rockets Hezbollah used against Israeli cities in the Lebanon conflict in the summer of 2006[13]
- The emergence of longer-range systems that have the potential to give countries a larger spectre of possible targets
- The modernization of short- and medium-range missile capabilities with conventional or unconventional warheads creates the possibility of use in conflicts and raises the spectre of possible escalation in areas where stability is questionable

Combating the dissemination of ballistic and cruise missiles in the Middle East requires systemic analysis of proliferation in the region

Preventing missile proliferation in the Middle East is indeed important when one considers a typical worst case scenario where capabilities could be disseminated to non-state actors or, even worse, used in a region-wide crisis or conflict.

In order to do that, one would have to consider the precise characteristics of that phenomenon by conducting a complete systemic analysis to identify functions concomitant to it and how they are interrelated. Of course, such an endeavour would be so long and difficult that it would require accurate information that is, unfortunately, difficult to come by. Nevertheless, it seems possible to make some points that could be of use in structuring a response.

Making a rocket is complicated…

It is not by pure chance that only a limited number of countries have really mastered all the necessary technologies and skills necessary to develop and manufacture modern missiles including, but not limited to, chemical propulsion, advanced materials, guidance and control, stage separation, underwater launch...

Let us take a known example to illustrate that point: Iraq. When Baghdad decided to work on longer range missiles prior to the first Gulf War based on the technologies they had available, Scud, they explored two different ways:

Augment the burning time of the original engine while diminishing the payload mass (project 144). This solution was possible because the Scud engine was actually made to burn for a longer time than necessary to obtain the 300km range. Modifications made to the system were actually minimal and not always technically sound. I have looked at weldings made on Al Hussein and I can bear witness to their lack of quality.

Try to redesign a Scud engine and guidance and control system. That effort produced mixed results. While project 1728 was able to reproduce some of the pieces making up a Scud engine, design and production issues occurred with others: turbo-pumps, for instance, actually had to be produced abroad (by Thyssen) and injectors were of such inconsistent quality that a limited number of injector plates were usable in Iraqi-made engines. Finally, project 1728 was forced to cannibalize Soviet engines to produce some indigenous ones.

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[13] David Makovsky and Jeffrey White, Lessons and Implications of the Israel-Hezbollah War. A preliminary assessment, in: *The Washington Institute for Near East Policy, Policy Focus*, N°60, (October 2006), p.41.

Efforts to produce complete inertial guidance systems (IGS) unequivocally failed and Iraq was forced to import complete IGS.

Iraq did put a lot of effort and money into its missile program and the least that can be said is that the results were hardly there. After the Gulf war, efforts directed at SA-2 modifications or the design of solid-propellant engines were limited and were not very successful.

Other indigenous programs, for instance, the Egyptian efforts in the 1950s and 1970s ran into similar problems. Cairo did have German rocket scientists but lacked the experience and management capabilities to complete any operational missile.

However, even if making a rocket proved difficult time after time, it is not an entirely daunting task. North Korea is a perfect example of missile development success. This was probably achieved through a combination of several elements:

Pyongyang started work on ballistic missiles at the end of the sixties while trying to make copies of the Soviet-supplied SA2 and SS-N-2s. These retro-engineering programs were not successful but they laid the groundwork for very important cooperation with China. In 1965, Kim Il Sung created the Hamhung Military Academy, which was to foster most of the country's technical capability. Cooperation with China on the DF-61 (a 1,000 km range BM) started in 1975 enabling the DPRK to gain more experience in liquid propulsion as well as inertial guidance. Cooperation lasted until 1978 when the program was cancelled by the People's Republic of China.

Its cooperation with Egypt on Scud technologies probably served as a second stage in the DPRK's efforts to obtain its own missile design and production capabilities. Transfer of complete Scuds systems as well as the probable transfer of knowledge and know-how from Egypt's own missile programs permitted the creation of a local copy of the Soviet Scud (although it is probable that the first missile launched in 1984 did use several pieces of the original missile).

The successes of the North Korean missile program may also have capitalized on possible informal contacts with Russian engineers at the end of the 1980s, just after the fall of the USSR. The design and production of Nodong is nonetheless a tribute to the Pyongyang missile industry's achievements in some of the technical fields necessary for rocket science.

… but countries can cooperate with each other to reduce the difficulty

Recent history has proven that cooperation between states is critical to obtain the capability to upgrade or create a ballistic missile inventory. Several examples can be quoted to exemplify the need to access outside assistance: Israel received help from France on the establishment of its missile program and the cooperation between the DPRK and Iran on liquid-propellant missiles was necessary for the latter to establish its own arsenal.

But in order to do so, because of their lack of skill and know-how in several domains and the existence of export control mechanisms, some countries may have to create and manage a complex network of banks, brokers, front companies and shipping lanes not only to be able to procure key components but also to exchange material and immaterial goods despite initiatives by several countries to limit exchange in this area.

With sanctions imposed on both the DPRK's and Iran's financial transactions or trade related to nuclear and ballistic missiles, the two countries have been obliged to devise ways of circumventing the awareness of the international community. Iran, in particular, can use a still very large fleet which is more and more operated by small front companies directed by

Pasdaran-related CEOs and an important network of financial institutions to facilitate their efforts.[14] In fact, since they were first detected in October 2003 proliferation networks have adapted to sanctions when the BBC China was intercepted and AQ Khan exposed for selling nuclear technologies to several countries,[15] even if they have been impacted by them.

A wide variety of options are available for combating missile proliferation

Creating a comprehensive policy for combating missile proliferation requires that all possible angles be explored from which the issue can be 'handled'. This policy must (1) limit the number of countries that are willing to start programs of WMD means of delivery, (2) reduce the capability of existing programs to access the key technologies and goods that they need to thrive and (3) if necessary, ensure that peaceful countries are protected against the possible use of these missiles and the warheads they are carrying.

It is clear that whatever the future holds in the Middle East concerning weapons of mass destruction, it is necessary to build international and regional initiatives that could enhance the security of Middle Eastern countries in an area where hundreds of ballistic missiles are deployed.

Combating proliferation networks should remain a priority

Efforts to address the proliferation economy have started in the wake of the revelations over the AQ Khan networks. They have since been focused on (1) disrupting the flows of ballistic missile-related equipment and knowledge to countries known to develop means of delivery for suspected WMD programs and (2) making it difficult for proliferants to use the international financial system to procure goods and technologies.

Economic globalization makes it necessary to coordinate the policies of states creating technologies and the countries sheltering service activities[16] that could be used by organizations involved in the trade of weapons of mass destruction. Progress has undoubtedly been made since 2003 following the launch of several initiatives meant to improve cooperation on export control. Yet, despite sanctions, as proven by the recent reports from the expert panels created under resolutions 1929 and 1874 (as well as by the group of experts of the FATF on proliferation financing[17]) both Iranian and North Korean procurement networks remain active.[18]

But genuine problems arise with the creation and use by states of **lists of goods and technologies** for which export and transit are generally subject to prior authorizations. Complete systems and their main components are usually relatively well controlled because their end use is not questionable. On the other hand, the establishment of a pertinent list of dual-use items can prove difficult considering constant changes in technology as well as the fact that proliferant networks often target components that are under existing technical

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[14] Andrea Stricker, British bank accused of doing massive illegal Iran business: settles with New York authorities, in: *ISIS Report*, (15 August 2012).

[15] C. Baum & C. F. Chyba, Proliferation Rings, in: *International Security*, Vol. 29, No. 2, (autumn 2004).

[16] Financing, transport/freight, transfer, brokering

[17] Financial Action Task Force, *Combating Proliferation Financing: A status report on policy development and consultation*, (February 2010).

[18] See as illustration, United Nations Security Council, *Report of the Panel of Experts established pursuant to resolution 1929*, (12 June 2012).

specifications.[19] For a country with limited administrative resources, the volume of work involved in the management of export or transit applications (including transport documents) for dual-use goods may become such that it introduces dysfunctions in their processing including delays, superficial analyses, mistakes, etc. Similarly, ill-informed or uninformed companies tend to submit incomplete or misleading demands to export control administrations.

A number of improvements can be considered for existing export control mechanisms:

- The universalization of 'catch-all' clauses. The purpose would not be to judge the intrinsic sensitivity of a product, but rather the intrinsic sensitivity of end users and the possible use they might make of it
- The possibility of creating lists of suspect final destinations could be considered and generalized as it exists in UNSC resolutions pertaining to Iran and North Korea. Such documents could be of genuine interest provided intelligence has made it possible to map their structure.
- It is urgent to create frameworks enabling the supervision of arms brokers because they play an important role in operations by networks by acting as the main relays for their procurement attempts abroad.[20] Only a few countries have introduced legal or political instruments that can be used to monitor brokers' activities and operations.[21] For instance, the European Union adopted a common position on the subject in 2003.[22]
- The 2008 FATF initiative to include proliferation financing in its scope has already produced interesting results, yet the banking sector is still very much unprepared and sometimes unwilling to deal with proliferation as it does with money laundering. As some experts have noted, networks are still able to use the international banking system to complete their transactions.[23]

Universalizing confidence-building measures could limit the incentives to proliferate

The development of missile capabilities is often the result of a perceived military disadvantage by some regimes. Although this does not mean that, if it is confronted with evidence to the contrary or it is demonstrated that its perception is false, such regimes would give up their ballistic missiles, it seems, nevertheless, helpful to discuss and if possible enter into a negotiation meant to enhance regionally or globally confidence between parties. Such negotiated instruments should not forbid the development of all categories of land attack missile but could go as far as banning some variants if their possession were to be regarded as unwarranted in a given environment. Of course, it is very doubtful that Middle East states would actually consider giving up their capabilities for the time being and one probably has

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[19] United Nations Security Council, *Report of the Panel of Experts established pursuant to resolution 1874* (2009), 2011, pp. 38-39.

[20] B. Gruselle & G. Schlumberger. Proliferation networks. Between Sopranos and Supermarkets, in: *FRS notes*, (July 2006).

[21] Loretta Bondy, *The US law on arms brokering in 11 questions and answers. Presentation to UN workshop in preparation of consultations on illegal brokering*, (May 2005).

[22] EU Council, *Position on the control of intermediaries in armament*, 2003/468/CFSP, (June 23 2003).

[23] Sonia Ben Ouagrham-Gormley, Banking on Non Proliferation, in: *The Nonproliferation Review*, 19:2, (2012).

to consider steps that would enhance transparency in arsenals and their use in the hope it could eventually lead to something else.

An instrument such as the Hague Code of Conduct (HCoC) is interesting because it is a politically binding instrument which recognizes ballistic missiles as possible means of delivery for WMD and as such considers their development as contrary *a priori* to regional stability. It encourages adherents to limit their development. But the code goes farther by making it compulsory for members to (1) make an annual declaration on their ballistic missile efforts and programs and (2) provide advance notification to other members of the test launch of its missiles. In itself, this measure would be useful in limiting the possibility of a test being mistaken for a combat launch and thereby provoking a response with deadly force that causes the entire situation to escalate.

Now, these would of course be modest steps. But in regions where the use of ballistic missiles could become so destabilizing because of the perceived level of ambiguity regarding the nature of their payload, modest steps could pave the way for more concrete advances. One also has to remain aware that taking these steps does not make missile defence programs or counter-proliferation efforts useless.

The Issue of 'Delivery Systems' in a Middle East Zone Free of Weapons of Mass Destruction

CARLO TREZZA[*]

Negotiating a zone free of weapons of mass destruction in the Middle East is a complicated matter and there are no precedents: so far only zones free of nuclear weapons have been established. There is also no precedent for the establishment of such a zone in an area undergoing a permanent political and military crisis, where WMD have been used and, allegedly, still exist. The conference to negotiate a WMD-free zone in the Middle East was called by a forum, the NPT Review process, which only has jurisdiction over nuclear issues and only over states party to the NPT. It has no jurisdiction over the remaining WMD.

But there are further complications to creating such a zone: the founding document for the establishment of the zone, the 2010 NPT Review Conference declaration on the Middle East, requires maintaining a 'parallel progress, in substance and timing, in the process leading to achieving the total elimination of WMD in the region.' Negotiations on nuclear, chemical and biological weapons should therefore evolve simultaneously. A breakthrough on one single issue would not be permitted under the declaration.

Finally, both the 2010 declaration and the original founding document (the 1995 NPT Review and Extension Conference resolution on the Middle East) provide not only for the elimination of all WMD but also for the elimination of their 'delivery means.' Although this may initially seem an additional obstacle, it could turn out to be an opportunity.

In a previous publication[1] I indicated a list of the most significant precedents of multilateral norms on WMD delivery systems which could serve as a term of reference for the 2012 Conference on the Middle East. Following is an adjusted and updated version of that list:

The Missile Technology Control Regime (MTCR) was formed in 1987 and seeks to limit the risks of proliferation by controlling exports of goods and technologies that could make a contribution to WMD delivery systems (other than manned aircraft). The regime places particular focus on missiles and unmanned aerial vehicles (UAV) capable of delivering a payload of at least 500 kg and having a range of at least 300 km. These parameters could be a useful reference point for the Middle East negotiators.

MTCR, however, is a technology transfer regime and not the regional weapons prohibition instrument foreseen by the NPT 2010 declaration on the Middle East. It is not legally binding and does not include a verification mechanism. The MTCR exclusion of manned aircraft would not apply to the WMDFZ in the Middle East. Turkey is one of the 34 MTCR members.

The MTCR parameters have also become a point of reference for bilateral engagements. Under an agreement between South Korea and the US, first signed in 1979 and revised in 2001, the range of South Korean ballistic missiles is limited to 300 kilometres and their

payload to 500 kilograms, like in MTCR. The deal was revised a few weeks ago: the range limit is now 800 kilometres and the payload can be increased depending on the range of the missile.

The 1988 INF Treaty between the US and USSR on the prohibition of their intermediate and shorter-range nuclear missiles (defined as having a range between 500 and 5,500 km) appears to be the most suitable bilateral term of reference for a total prohibition of missiles capable of delivering WMD. This issue was addressed in an interesting recent article.[2] The Treaty's sophisticated dismantlement techniques and verification measures, including the use of 'national technical means', are indicative of the high level of requirements and costs involved in missile elimination and verification mechanisms.

The 1991 UN Register of conventional arms requires all UN member states to report on weapons transfers including missiles, missile launchers and combat aircraft. Although there is no legal obligation, all Middle Eastern states are expected to notify the UN of their missile and combat aircraft exports and imports. According to the latest UN report, no Middle Eastern country made any submission in 2011.

Although delivery systems *per se* were not on its agenda, the Arms Control and Regional Security in the Middle East (ACRS) discussions were the most significant regional attempt to deal with arms control in the Middle East. Established in 1991, they came to an end in 1995 without achieving any meaningful result. They were held within the framework of the Middle East peace negotiations and therefore had a specific Arab/Israeli connotation. The ACRS discussions focused mainly on confidence building. Missiles were among the weapons subject to elimination and verification by the two mechanisms, UNSCOM and UNMOVIC, established by UNSC resolutions 687 and 1284 regarding Iraq. These resolutions introduced drastic measures for elimination and intrusive verification. Resolution 687 of 1991 provided, *inter alia*, for the 'destruction, removal, or rendering harmless, under international supervision … of all ballistic missiles with a range greater than 150 kilometres and related major parts and repair and production facilities'. With resolution 1284 of 1999, UNSCOM was replaced by UNMOVIC, which acted on the same missile parameters with a reinforced inspection system. Iraqi missiles were actually destroyed under UNMOVIC supervision.[3]

The Hague Code of Conduct (HCOC), which is an offshoot of the MTCR, is basically a transparency mechanism for missile transfers adopted in 2002. Its main features are information exchanges by states on their policies regarding ballistic missiles and space launch vehicles and pre-notification of their launches. The Code refers exclusively to ballistic missiles and space launch vehicles.

All states of the region are also legally bound by UNSC resolution 1540 of 2004 which affirms that proliferation of WMD 'as well as their means of delivery' constitutes a threat to international peace and security. The implication of such language is that international sanctions and even the use of force under chapter 7 of the UN Charter can be envisaged. For the purposes of resolution 1540 the term 'means of delivery' is defined as 'missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons that are specially designed for such use.' More specific definitions would probably be necessary for a regional prohibition which would also have to include aircraft. But they could all be founded on the UNSCR 1540 definition.

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[2] Michael Elleman: Banning Long-Range Missiles in the Middle East. A First Step for Regional Arms Control, on *Arms Control Today* (May 2012).

[3] On WMD and missile elimination prior to the 2003 Iraq War, see the fascinating book: Hans Blix, *Disarming Iraq*, New York: Pantheon (2004).

UNSC resolution 1929 of 2010, the latest resolution regarding the Iranian nuclear problem, also contains references to missiles. It indicates that Iran shall not undertake any activity related to missiles capable of delivering nuclear weapons. States shall not supply Iran with combat aircraft, missiles or missile systems. The Syrian missile activities are not restrained by any UNSC resolution. The mechanisms established for Iraq and Iran are formulated as sanctions and would not be suitable for a voluntary and consensual process such as the one foreseen under the NPT auspices.

In view of the peculiarity of the NPT mandate and of the persistence of intra- and interstate tension and violence in the entire region, exacerbated by the developments during the Arab Spring, legally binding and verifiable prohibition and elimination of WMDs and their delivery systems appears a distant objective. Joining and effectively implementing existing legally and non-legally binding relevant commitments, so far widely neglected in the Middle East, would be a more achievable goal. The first step towards an arms reduction process should however be the establishment of a set of confidence-building measures as indicated in para. 6 of the 2010 NPT declaration on the Middle East. This provision applies to all WMDs as well as to delivery systems.

Surprisingly, the wording of that declaration suggests that only negotiations on WMDs should evolve in parallel: delivery systems are not mentioned. Unless one believes that these systems should be dealt with separately for nuclear, chemical and biological weapons – something which would cause confusion and duplications – a 'stand-alone' table jointly dedicated to all WMDs delivery systems could follow an independent and possibly faster track.

The most straightforward way to initiate the process would be for Middle Eastern countries to join the HCoC Code, which, as a measure of soft security, would enhance confidence in the region. Libya, Jordan, Iraq, Turkey, Morocco and Sudan are among the 134 countries having already joined it. Regional transparency measures are specifically foreseen by the Code.

The UN Register of Conventional Arms contemplates reporting on transfers of delivery means, such as missiles, combat aircraft and even 'large-calibre artillery'. All these weapons are 'dual systems' capable of delivering conventional and non-conventional arms. Implementation of the Register's provisions is pertinent to the Middle Eastern WMD context and would therefore be a meaningful confidence-building step.

The selection of the 'relevant international organizations' called upon to prepare background conference documentation on delivery systems (MTCR, HCoC, UNODA, civil society?) and the definition of the term 'delivery systems,' primarily based on range and payload, will probably turn out to be one of the first issues to be resolved. Preparatory reflection now will probably make life easier at the time of the conference.

The Middle East Regional Security Regime and CSBMs

SHLOMO BROM[*]

The Middle East is well short of having any type of security regime and is one of the few regions lacking any type of cooperative security regime whatsoever. There are some interstate frameworks, for example the Arab League, but they do not encompass the entire region, and they are quite hollow when it concerns real substance. During the 1950s, at the height of the Cold War, the US tried to establish a collective security regime in the Middle East based on similar regimes that had been established in other regions as a way of containing the Soviet Union and preventing expansion of the Eastern Bloc. This alliance, the Baghdad Pact, failed because it proved incapable of rising to the challenge of the wave of Arab Nationalism led by Gamal Abdel Nasser. In May 1981 the Gulf Cooperation Council (GCC) was established. It is a political alliance of the Arab States bordering the Persian Gulf and located on the Arabian Peninsula. It was also supposed to serve as a kind of military alliance. For that purpose a unified military presence, Peninsula Shield Force, was established by the member states. So far it is the only regime of its kind that has proved to be resilient and to some extent effective, mostly because it is composed of like-minded monarchies, obsessed with the survival of their regimes. The GCC demonstrated its usefulness when, after the protests of the Arab Spring had engulfed Bahrain and endangered the Sunni monarchy, Bahrain's government requested the intervention of the Peninsula Shield Force and police from the GCC, who arrived on 14 March and participated in the 'successful' suppression of the rebellion. In any event, the GCC is a merely sub-regional organization[1] and it is not a cooperative security regime aimed at regulating and establishing norms and rules of the game among states that have adversarial relationships.

The only real intergovernmental attempt to discuss the establishment of a cooperative regional security regime took place in the first half of the 1990s within the Arms Control and Regional Security Group (ACRS) of the Multilateral Negotiations that were part of the Madrid Process that started at the end of 1991. In this group the parties tried to emulate to some extent the European experience by adopting ideas from the Helsinki process. This ambitious attempt failed and the talks collapsed for two main reasons: the failure to reach understandings on the path towards arms control agreements, especially in the nuclear domain, and the linkage between the multilateral negotiations and the bilateral ones, coupled with the failure of the bilateral negotiations and the stalemate in the Israeli-Palestinian track. It is also possible that the very formal and institutional nature of the European security regime was unsuitable for the Middle East, a region that lacks interstate cooperation in most of the important areas and is characterized by a multitude of unresolved interstate disputes and a very high level of mutual distrust. Nevertheless, ACRS has had some important achievements as the parties were successful in identifying a number of CSBMs that may also

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[*] Brig. Gen. (ret.) Brom, a senior research associate at the Institute for National Security Studies, joined the Jaffee Center in 1998 after a long career in the IDF. His most senior post in the IDF was director of the Strategic Planning Division in the Planning Branch of the General Staff.

[1] Jordan and Morocco were invited to join the GCC in 2011 following the events of the 'Arab Spring' as a way of expanding the alliance of the monarchies to assure their survival, but it seems it was not a serious offer and it simply faded.

be useful in the Middle East environment. There were some very modest beginnings of the implementation of some of these CSBMs by a number of participant states, but the stalemate in the bilateral tracks led to the end of the multilateral talks, and these very cautious first steps were withdrawn.

Now, 17 years later, the multilateral tracks are still in a complete deadlock. It seems the present situation of the Middle East peace process is worse than it has ever been since the beginning of the Madrid process in 1991. The parties are not capable of re-starting any meaningful negotiations, and certainly not of concluding any agreements. On top of that, the shockwaves produced by the so-called Arab Spring, the rebellions of Arab populations against their dictatorial regimes, have not settled down and have created an atmosphere fraught with uncertainty. Whereas, in the past, governments could assess the governments in the neighbouring states and have a good grasp of their behaviour, in the present atmosphere of uncertainty everyone expects the worst of their neighbours and the level of mutual distrust is only rising. The new developments also make resumption of the bilateral negotiations in the different tracks more difficult and in some cases utterly impossible. Can Syria resume peace negotiations with Israel when it is engulfed in a civil war? Can Lebanon start peace negotiations with Israel without Syrian consent?

Another development that may have significant implications on the ability to resume Mideast regional security talks is the 2010 NPT Review Conference decision to convene in 2012 a conference to discuss the establishment of a Middle East Weapons of Mass Destruction-Free Zone (MEWMDFZ). Only recently, a senior Israeli official, the director of the Israeli Atomic Commission (IAEC), announced that Israel had decided not to participate in this conference. Following that decision, it will be difficult to convene the conference on the scheduled dates, in December 2012, if at all. Israeli willingness to discuss a MEWMDFZ will probably be the condition for Arab consent to include Israel in regional security discussions.

Taking all that into account, Middle East states will probably find it very difficult to perceive that serious talks on a Middle East cooperative security regime can resume in the foreseeable future. The feeling is that some answers to a number of critical questions should be given before this idea can be seriously considered:

Assuming that the bilateral talks are not going to be re-started soon as well as the low probability of real talks, is it possible to de-link regional security talks from the bilateral track and the WMDFZ talks and resume the one set of talks without the other?

How can this kind of regional talks start when the states are so obsessed with the repercussions and uncertainties of the Arab Spring, of which some of them are still at their epicentre?

Is it possible to adopt a less formal and institutional approach to these talks and the arrangements they strive to develop?

De-linking the multilateral track and nuclear talks from the bilateral tracks

The consistent Arab position is that any advances in regional cooperation that will include Israel are dependent on success of the bilateral tracks. The Arab states suspect that Israeli support of regional talks, regional security regime and CSBMs is only an Israeli ploy aimed at achieving 'normalization' of the Israeli relationship with the Arab world without Israel's willingness to pay the price for that, whether in terms of bilateral peace agreements with the neighbouring Arab nations, or in terms of progress towards nuclear disarmament. One good example is the 'Arab Peace Initiative' (API). According to the language of the API, adopted by the Arab League in 2002 and repeatedly re-confirmed since then by the Arab League states, if the tracks are concluded successfully, the Arab countries will 'consider the Arab-Israeli conflict ended, and enter into a peace agreement with Israel, <u>and provide security for all the states of the region.</u>' That is a very clear commitment for the establishment of a cooperative regional security regime following the conclusion of final agreements in the bilateral tracks with the Palestinians, Syria and Lebanon. That raises a 'chicken and egg question' because it is possible to argue that the conclusion of the bilateral agreements may be dependent on some confidence-building processes that will enable the parties to take the security risks ensuing from the conclusion of these agreements. It is also possible to argue that the growing uncertainties at play in the Middle East only emphasize the need for forums that will provide effective inter-state dialogue and the lack of such dialogue denies the parties one of the main instruments for dealing with such uncertainties. The problem is that political leaders are risk-averse in most cases, and they are reluctant to taking risks, especially in times of uncertainty. On one hand, it is difficult to assume that the Israeli leadership will take bold initiatives in its relationship with its Arab neighbours and make it easier for them to start a dialogue with Israel. On the other hand, the Arab populist regimes, and especially the new ones, are more reluctant to having dialogue with Israel because of a combination of their ideology (mostly in the case of Islamic parties that came to power) and fear of their constituency's virulently anti-Israeli stance.

All of that implies that it will be extremely difficult to resume talks on a cooperative regional security regime in the Middle East unless the talks are informal and without any commitment by the participating governments. That can be changed in one of two scenarios. The first scenario would be one in which there is a surprising breakthrough in the Israeli-Palestinian track. The second scenario is one in which Israel changes its approach towards participation in the MEWMDFZ conference scheduled for December 2012. If Israel does participate in the conference, it can make its participation conditional on an understanding that the conference and the process of dialogue that it will start will discuss the MEWMDFZ in the wider context of the security realities of the ME, and within it the necessary security arrangements that should be established to provide security to all. The probability of either of these two scenarios is very low.

Dealing with the turbulences of the Arab Spring

The Arab Spring makes dialogue between Arab States and Israel even more difficult. Egypt's new Muslim Brotherhood president, Mohammed Morsi, is not willing to utter the word Israel and is always looking for indirect ways of dealing with Israel. On the other hand, the Arab Spring augmented the role of civil society and generally contributed to free speech.

The real threats to free speech and views now are represented less by the regimes and more by the wrath of incited mobs (the ugly face of civil society). The Islamic political parties that are on the rise are adjusting to their new positions that give them not only new powers but also new responsibilities, and the old answers built upon their Islamic ideology are not good enough to deal with this difficult transition. To some extent it creates an openness that did not exist before. That may make it easier for individuals to participate in informal talks, and even easier to recruit new participants to these talks and not the usual suspects: liberal intellectuals from the old elites.

The conclusion to be drawn from the discussion so far is quite clear. The only really open venue for discussion of regional security is continuation of Track 2 talks that will develop ideas, market them to the political echelons and try to present very cautiously to public opinion. Overly aggressive public discussion of such sensitive subjects in the loaded atmosphere of the Middle East may, in many cases, only alienate the political class. It can also be assumed that the participants in these Track 2 talks will only come from one subset of the Middle East, from states that either were democratized enough to enable free speech or from states in which the political leadership allows this kind of activity even though these states are not so democratic. The special challenge is the need to include in these Track 2 talks members of the emerging new political and intellectual elites in the Arab states (especially Islamists) as part of their learning more about a process which is new to them and growing accustomed to their status within this process. This adaptation process by new government leadership will be an important benchmark for the success of these initiatives.

In some limited cases it may be possible for Israel to start bilateral discussion of regional security with some states as an offshoot of bilateral security discussions. Sometimes the developments of the Arab Spring provided the basis for more intensive security dialogue with Israel's neighbours. An interesting example is Egypt. The fall of the Mubarak regime created a political and security vacuum in the Sinai Peninsula. That was used by radical Jihadist and Palestinian groups to establish a growing armed presence in this area, creating severe security problems for Egypt and Israel, which borders the Sinai. The two parties have no other choice but to increase security cooperation and intensify their security dialogue. These talks are an opportunity that can be used to broaden the scope of topics discussed.

What should be discussed in these Track 2 talks?

The topics for discussion should be based on the ACRS experience and lessons and the very rich history of regional security Track 2 initiatives. The first area of focus might be the experience gathered from other regions. A major lesson is the need to look for models that are different from the European one and are less formal and institutional. The Asian-Pacific model, a combination of an orderly Track 2 and governmental dialogues, may be a good point of reference.

The second area of focus should be the scope of participation. One main point is the definition of the region for the purpose of regional security. It seems this was dealt with quite effectively in ACRS where a good working definition was worked out. The only modification that should be discussed pertains to the place of Turkey. In ACRS it was considered an out-of-region actor because of its orientation towards NATO and Europe. The changes in Turkey's orientation towards the Middle East in recent years make it necessary to consider it part of the Middle East. Middle East security is strongly influenced by out-of-region powers.

That makes it mandatory to include some of these powers in regional security arrangements, but in a way that will differentiate between them and the regional members.

The security arrangements and their discussion should be inclusive. One of the problems of the ACRS was the exclusion of several important states of the ME. That does not mean that opening of Track 2 dialogues should be dependent on the ability to have participants from all states of the region. Everyone will be invited but the process can start with those that are willing to participate. Others may join in later. Even implementation of certain steps, especially CSBMs, can start with a subset of the region's states.

According to the revised ACRS definition, the Middle East is a large area that stretches from Morocco and Mauritania to Iran and from Sudan and Yemen to Turkey. There are security issues that are common to this entire area but there are security issues of a more local nature that are relevant to particular sub-regions. In general, the Middle East can be divided into three sub-regions: the Levant (the main area of the Arab-Israeli conflict), the Gulf area, and the Maghreb. There is some overlapping among these sub-regions and states can belong to more than one region. This can be dealt with through discussion of security arrangements based on the idea of a 'geometry variable,' namely, by devising a package of arrangements. Some of them would be for the entire region and others for specific sub-regions.

Confidence- and security-building measures should be an important part of the discussion. The lack of these kinds of measures in the Middle East is striking. If we take another volatile area, the Indian Peninsula, in comparison, we see that in the Indian Peninsula, as in the Middle East, the conflict seems intractable. In addition, it is also one that has had a long series of high- and low-intensity armed conflicts. Nevertheless, the two parties, India and Pakistan, were successful in agreeing on an extensive list of CSBMs. In the Middle East even feeble attempts at unilateral CSBMs did not last for long.

In ACRS a Helsinki Process-like list of CSBMs was discussed and their definition agreed, but it was decided that the implementation of these CSBMs would be voluntary and not mandatory. As a result, only very few states manifested willingness to implement these CSBMs even before the entire process collapsed. It may be helpful to discuss fewer CSBMs with more probability of implementation.

One area in which CSBMs may be more useful in the reality of the Middle East is the ballistic missiles domain. Proliferation of these systems is very common in the Middle East, and their usage is also becoming common. There is a specific problem concerning the short warning times involved with these systems. CSBM-like advance notification of ballistic missiles tests can be a good way of easing unnecessary tensions.

Conclusions

Barring real progress in the Middle East peace process it is difficult to imagine the region's states seriously considering issues of regional security including establishment of cooperative security regimes and implementation of CSBMs. The upheavals of the Arab Spring make it even more difficult to assume that such progress will materialize or that states will be willing to seriously engage in cooperative regional security means without such progress. States will continue to operate in the security domain driven by zero-sum game thinking.

At the same time it is important to continue developing and exploring ideas for the establishment of cooperative regional security regimes that will be suitable for the Middle East. That our region has so many security problems and tensions and no hope of finding

cooperative ways of dealing with some of these problems is a luxury the region's states cannot afford.

At present, engagement with cooperative regional security regimes can be made via informal frameworks only. It is to be hoped some officials can participate in these frameworks in their personal capacity, thus making it easier for ideas developed in these frameworks to trickle into the states' systems. It will help to create and preserve a regional security community that will be available when the time is ripe for these ideas.

These informal frameworks should start to operate even when there is only a subset of states that are willing to allow their people to participate in such frameworks; but the process should be inclusive and open to all states. It is to be hoped that more states will join in as the process unfolds. It does not make sense to exclude states because of the nature of their regime or their animosity towards other states. The whole idea of the discussion is to deal with these conflicts.

The process should retain a high level of flexibility. It is not a matter of one size fits all. The principle of a 'geometry variable' can prove to be very useful in this context. Flexibility will also be expressed in the willingness to include in the process out-of-region states that have a real influence on the region's security or that may prove useful because of their extensive experience with cooperative security regimes.

A think piece on confidence-building measures in the Middle East

SINAN ÜLGEN[*]

The most obvious and perhaps the most useful first step is to address the issue of endemic mistrust and launch confidence-building measures (CBMs) among all parties. In fact, such methods were investigated previously; the United Nations study on the 'Establishment of a nuclear-weapon-free zone in the region of the Middle East'[1] suggested a list of CBMs,[2] and the ACRS process included a combination of conceptual and operational CBMs.[3]

Security Assurances

The complexity of the Middle Eastern issue calls for both positive security assurances – guarantees that nuclear weapon states 'will act immediately' in the event of a nuclear attack on a non-nuclear weapon state party to the NPT – and negative security assurances – guarantees that nuclear weapon states will refrain from using nuclear weapons against non-nuclear weapon state parties to the NPT. These can be broadened to include chemical and biological weapons as well, and can range from specific assurances to very broad ones. A 2009 CNS report suggested that states can provide broader negative security assurances to one another regardless of their possession of WMD[4] – in fact, it might be useful for the states to go so far as to reinstate non-aggression pacts which had been abandoned after WWII.

Two major CBMs that could be established in the medium term are the introduction of a region-wide test ban to cover all WMD and the creation of a region-wide no-first-use regime.

Regionalism

The conflict pattern, and thus the rationale for WMD proliferation in the Middle East, is inherently regional[5]. Therefore, in order to reverse the situation, regional solutions must be found; regional insecurity cannot be alleviated without altering regional relations.[6] Although the NPT, the Additional Protocol and IAEA safeguards are recognized as legitimate and

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[1] United Nations Document A/RES/45/52

[2] M. K. Said, Middle East Weapons of Mass Destruction Free Zone: Regional Security and Non-Proliferation Issues, In: V. C. al., *Building a Weapons of Mass Destruction Free Zone in the Middle East: Global Non-Proliferation Regimes and Regional Experiences*, Geneva: United Nations Institute for Disarmament Research, (2004), (pp. 123-133).

[3] Monterey Nonproliferation Strategy Group. *Nuclear Weapon Free Zones and the Middle East.* Monterey: James Martin Center for Nonproliferation Studies, (2009).

[4] Ibid.

[5] M. K. Said, Security and Defense Dilemmas in the Middle East. The Nuclear Dimension, in: *Pugwash Meeting no. 279.* London, (2002).

[6] A. Flibbert, After Saddam. Regional Insecurity, Weapons of Mass Destruction, and Proliferation Pressures in Postwar Iraq, in: *Political Science Quarterly*, Vol. 118 No. 4 (2003/2004), pp. 547-567.

effective, they are not sufficient for the region due to its unique history and sensitivities.[7] Therefore regional institutions and verification methods should be established.

One way of fostering dialogue and cooperation, and hence breaking isolation, is through regional organizations. In 2004, Saudi Arabian Foreign Minister Saud al-Faisal proposed the inclusion of Iran and Yemen in the GCC, and argued that the region should not depend on the US for its security.[8] The inclusion of Iran in a security organization which was traditionally led by one of its rivals, Saudi Arabia, might raise several questions at first glance. Yet this experiment might resemble the Shanghai Cooperation Organization, which is centred on two poles, Russia and China, which compete, among other things, to increase their influence over the other Central Asian member states of the organization. Although the alliance never evolved into a NATO-like structure, it has had significant effects on regional security because of its nature as a platform for solving territorial issues, tackling joint security issues such as terrorism and illicit drug trafficking, and stimulating bilateral and multilateral economic relations, especially in the energy sector. This effect could be replicated in the Middle East, through broadening membership to already existing organizations, or forming new ones that are more inclusive and less comprehensive and demanding. Such an organization could have an agenda ranging from earthquake security to oil clean-up, from shipping safety to security of nuclear power stations;[9] what is important is not the agenda, but paving the way for dialogue and cooperation among states which traditionally compete against each other.

Middle Eastern states should be reminded that they have several areas in which they can cooperate. All states involved in the region, even eminent rivals such as the US and Iran, share interests in stabilizing Afghanistan and Pakistan in order to stop the flow of drugs, arms and extremists, as well as in ensuring that oil supplies and prices remain stable.[10] There are also other areas in which particular groups of states share interests, such as combating terrorism and sharing water sources, which can generate bilateral or multilateral cooperation.

Regional cooperation could also be fostered through joint peaceful nuclear and biochemical projects. One way of overcoming sensitive nuclear enrichment and fuel reprocessing issues would be to establish multilaterally owned and operated facilities. Jordan and Turkey maybe good candidates to host such facilities, as Jordan has recently discovered uranium reserves and Turkey has expressed its interest in hosting a regional fuel production centre.[11]

This would have two major benefits. One, in the presence of multinational management and staff, it would be harder for states to divert uranium for nuclear weapons research programmes; and two, the region would need fewer facilities than if each country built its own production centres to cover domestic demand, and fewer facilities makes oversight easier.[12] On the other hand, having international staff also means that more people will have access to nuclear know-how, creating a proliferation risk. However, this concern could be addressed by setting up a 'black box' arrangement at the facility so the technology cannot be accessed.

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[7] Monterey Nonproliferation Strategy Group. *Nuclear Weapon Free Zones and the Middle East.* Monterey: James Martin Center for Nonproliferation Studies, (2009).

[8] J. A. Russell, Saudi Arabia in the 21st Century. A New Security Dilemma, in: *Middle East Policy*, Vol. 12 No. 3 (2005), pp. 64-78.

[9] M. Kraig, Forging a New Security Order for the Persian Gulf, in: *Middle East Policy*, Vol. 13 No. 1, (2006), pp. 84-101.

[10] Ibid.

[11] T. Lorenz & J. Kidd, Israel and Multilateral Nuclear Approaches in the Middle East, in: *Arms Control Today*, (October 2010).

[12] Ibid.

Cooperating on energy matters can be as simple as creating grid connections between states in the region. For example, Israel is not connected to the grids of any of its neighbours and hence is an 'energy island', in other words, it has source all energy through imports[13]. Creating grid connections between countries and establishing trade in surplus energy could pave the way for cooperation on nuclear energy matters and may even lessen the need for establishing new nuclear facilities.

States can also cooperate on educating one another on the defensive side of nuclear, chemical and biological technologies, i.e. on safety and security protocols. Joint security drills and inspections can also be conducted as confidence-building measures. This is not only a blessing that Israel can offer to others; since most aforementioned states have at least had defensive chemical and biological weapons programmes, each side may have something to bring to the table in this area.

Some states are actually cooperating on nuclear matters today. The Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) based in Jordan focuses on research in disciplines such as molecular environmental science, x-ray imaging and clinical medical applications, and participation is open to all scientists in Middle East. Its current members are Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Turkey, and the Palestinian Authority. SESAME offers a rare opportunity for Israeli and Palestinian scientists to work side by side[14]. Increasing participation and membership in these and other projects would be beneficial to all states in the region.

Role of the WMDFZ

The WMDFZ process is not expected to address all existing and future security dilemmas in the region. What it is expected to do, however, is to make these sources of insecurity more apparent for all sides. Recognition of the dynamics of security dilemmas may in itself help alleviate the dilemmas themselves.[15]

It has been suggested that for Israel, the value of possessing nuclear weapons might be declining after seeing the uselessness of such weapons against the actual security threats to Israel: Hezbollah, Hamas or the intifada.[16] While Israel is unlikely to sign the NPT in the short run, as suggested by Avner Cohen, the country might sign a separate document, perhaps with India and Pakistan, which would at least inhibit further development of their nuclear programmes and set a timeline for phasing out fissile material production.[17] Such an agreement or its variations could prove to be an excellent starting point for building up a WMDFZ.

A final issue to address is how the overall process should be managed. Two major approaches stand out against the linear 'road map' approach, which consists of sequential steps to be undertaken by the parties: [18] the 'framework' approach and the 'basket' approach.

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[13] Ibid.

[14] Ibid.

[15] A. Flibbert, After Saddam. Regional Insecurity, Weapons of Mass Destruction, and Proliferation Pressures in Postwar Iraq, in: *Political Science Quarterly*, Vol. 118 No. 4 (2003/2004), pp. 547-567.

[16] R. Johnson, Rethinking Security Interests for a Nuclear-Weapon-Free-Zone in the Middle East, in: *Disarmament Diplomacy*, Autumn No. 86, (2007).

[17] T. Lorenz & J. Kidd, Israel and Multilateral Nuclear Approaches in the Middle East, in: *Arms Control Today*, (October 2010).

[18] Ibid.

The framework approach would have similar steps to the road map approach, for example CBMs might also come first in the framework approach, but these steps would be in the context of a wider set of goals.[19] It would therefore be less linear, more flexible and have various routes for progress.

The basket approach resembles the 1972-1975 Conference on Security and Co-operation in Europe that led to the Conventional Forces in Europe agreement. It consisted of three 'baskets' for cooperation, which later became the Organization for Security and Co-operation in Europe's (OSCE) three dimensions, namely the politico-military dimension, the economic and environmental dimension, and the human dimension.[20] A similar approach could be applied to the WMDFZ process in Middle East; since the baskets are separate from one another, the lack of progress in one does not impede progress in other baskets, whereas progress in one basket also contributes to the other baskets as it contributes to dialogue, trust and hence cooperation. Johnson proposes three main baskets; the first would focus on guiding principles and humanitarian issues, the second on WMD and achieving a WMDFZ, and the third on economic, scientific and environmental cooperation.[21] While the contents might change depending on the needs of the parties, the approach might be very valuable in a mistrust-ridden region, as the success of its precedent shows.

Parallelism versus Sequentialism

Rather than seeing the road towards regional peace and WMD disarmament as mutually exclusive, or as a matter of what order to do things in, the two can be seen as mutually reinforcing and can be undertaken simultaneously. For example, initially Israel could sign an agreement on no first use of WMD (with or without disclosing its arsenal) and in return, other states can sign bilateral or multilateral agreements of non-aggression with Israel. Insisting on which issue should take precedence would be (and has been), in Johnson's words, 'a recipe for doing nothing'.[22]

The same is true for the Israeli-Palestinian issue. Rather than engaging in constructive dialogue, let alone taking solid steps, most parties have actually done nothing more than blame one another. Neither side is comfortable with the stalemate – every opportunity has been wasted, every show of goodwill has gone unrealized, and every genuine effort for establishing lasting peace has been squandered for the last 64 years. Rather than linking the solution to every problem to the Palestinian issue, the Arab states and Iran should realize that the issue can be resolved only by moving forward in other areas. This does not, of course, mean that Israel should be able to get away with what it can in the meantime; among other issues, the illegal construction of settlements should be prevented. What is meant here is that states should be conducting these processes parallel to one another, where the achievements in one would reinforce and enable achievements in others, but obstacles in one would not complicate, at least in most cases, other processes.

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[19] Ibid.

[20] OSCE, *The three OSCE dimensions*, (2012), http://www.osce.org/item/44318, (Retrieved May 6, 2012).

[21] For a detailed list of the contents of Johnson's proposed baskets, please see R. Johnson, Rethinking Security Interests for a Nuclear-Weapon-Free-Zone in the Middle East, in: *Disarmament Diplomacy*, Autumn No. 86, (2007).

[22] Ibid.

Isolation versus Engagement

States should also be giving serious consideration to the question of how to win certain parties over. It is almost certain that Tehran cannot be won over with the strategy that the US and Israel have been pursuing for several years. The problem here is not *why* coercive diplomacy is employed –coercive diplomacy has had its uses in the past – it is *how* it is employed. While it is in itself very doubtful whether success can be achieved through economic sanctions, adding the threat of regime change[23] and even the threat of use of force as negotiating points is very likely to be a recipe for ineffective diplomacy. It is more likely that a medium-sized state with regional aspirations will dig in and harden its position and determination rather than caving in to such threats. While they are threatened by Iran's nuclear programme as well, Arab states understand Iran's rationale for pursuing such a programme better than the US and regard Washington's policy to be 'naive and counterproductive, as it plays into the ambitions of hard-liners and undermines moderates who seek to remain within the non-proliferation regime'.[24] Arab states are also worried that American, Israeli or British airstrikes against Iran's nuclear facilities would cause irreparable damage to the process, and would also cause massive protests in the region, especially in the Arab states – protests that the Arab states would want to avoid especially in such turbulent times. If the US and Israel insist on actually hitting Iran with 'sticks', it would be preferable for them to employ more covert methods such as the Stuxnet computer worm.[25]

The same is true for the method that Arab states employ against Israel. Cornering and isolating already isolated and insecure states further is not the answer. It is true that Israel has been a free-rider to the NPT regime; it stayed outside the regime and developed its nuclear programme without any restrictions, but benefited from the limitations that the regime put on other states in the region[26] – and this should change. Yet Arab states are unlikely to make headway with their 'Israel bashing' – done mostly in the form of introducing various resolutions against Israel's nuclear programme in different fora.[27] One recent resolution is the Israel Nuclear Capabilities Resolution adopted in 2009 in the IAEA General Conference. The resolution criticizes Israel's nuclear programme and calls upon Israel to accede to the NPT and comply with IAEA safeguards. The resolution has been an object of contention between the two camps since 2006, when Arab states became frustrated with the lack of progress on the NWFZ in the region. Luckily for the 2012 conference, Arab states decided not to introduce the resolution at the General Conference in 2011, in part because it would negatively affect the 2012 conference.[28]

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[23] B. Jentleson, Coercive Diplomacy. Scope and Limits in the Contemporary World, in: *The Stanley Foundation Policy Analysis Brief*, (December 2006).

[24] R. Johnson, Rethinking Security Interests for a Nuclear-Weapon-Free-Zone in the Middle East, in: *Disarmament Diplomacy*, Autumn No. 86, (2007)Johnson, 2007 pg.6

[25] Y. Katz, Stuxnet virus set back Iran's nuclear program by 2 years, in: *The Jerusalem Post*, (December 15,2010), http://www.jpost.com/IranianThreat/News/Article.aspx?id=199475, (Retrieved May 1, 2012).

[26] R. Johnson, Rethinking Security Interests for a Nuclear-Weapon-Free-Zone in the Middle East, in: *Disarmament Diplomacy*, Autumn No. 86, (2007).

[27] Vienna Center for Disarmament and Non-Proliferation, *Fact Sheet #2. Information Relevant to the IAEA General Conference, Topic: Middle East Issues,* Vienna: James Martin Center for Nonproliferation Studies, (2011).

[28] Ibid.

The Role of Outside Actors

The role of outside actors in furthering an improved security environment in the region should also be underlined. One important step would be to tighten controls on the transfer of unconventional military technology and assets to the region. The most certain way of achieving this is targeting the suppliers; American and European laws must be made stiffer; Russia, China, India, Pakistan and others should be pressured, and intelligence assets of both external and regional actors should be mustered in order to monitor illicit transactions.[29] In fact, the co-sponsor states can take the initiative of freezing their transfers of unconventional military technology to the region indefinitely to show their commitment and to convince other suppliers.

It would be logical to assign a Special Representative to the UN Secretary-General to oversee and aid the entire process. This proposal was brought forward by Egypt, Russia and several other key countries at the 2009 NPT Preparation Committee.[30] The representative would primarily act in a similar capacity to the facilitator of the 2012 Conference, but on a broader scope and on a permanent basis, and might be given additional powers and responsibilities if the parties deem them necessary.

Turkey and the WMDFZ

Finally, a few words on Turkey and the WMDFZ. When Egypt and other Arab countries began to champion the idea of a Middle East free of nuclear weapons in the early 1960s, Ankara did not want to associate itself with the initiative. There were three fundamental reasons for this early stance. The first one was that as a NATO member, Ankara could not really be part of an endeavour led by a member of the Non-Aligned Movement which could have serious implications for the security order in the region. Secondly, as a NATO member host to a range of US forward deployed nuclear weapons, Ankara's position was even more ambiguous. And finally, the security relationship and intense collaboration with the US and gradually with Israel prevented Ankara from being part of a campaign seemingly designed to bring pressure on Israel regarding its nuclear deterrent. On the contrary, until very recently, Turkey viewed Israel as its security partner in the region and thus had no reason to participate in a movement that would alienate it from this important regional ally.

Today the considerations that affect Ankara's perspective on a Middle East Nuclear Weapon Free Zone (MENWFZ) have changed considerably, starting with the relationship with Israel. The second factor which has led to the overhaul in Ankara's thinking has been the deteriorating regional security situation resulting from the wave of Arab reforms across the region. These changes have had a radical impact on Turkey's outlook on regional disarmament and the WMDFZ.

The deteriorating regional security situation has alerted Turkish authorities to the implications of a potential conflict with neighbours with WMD capabilities. As a result, Turkey's interest in the WMDFZ has been rekindled. In other words, Turkey's interest in the WMDFZ process is now more substantive and goes beyond the tactical objective of criticizing Israel. A clear example of this transformation in the country's foreign policy vision

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[29] P. W. Rodman, Middle East Diplomacy after the Gulf War, in: *Foreign Affairs*, Vol. 70 No. 2, (1991), pp. 1-18.

[30] Monterey Nonproliferation Strategy Group. *Nuclear Weapon Free Zones and the Middle East.* Monterey: James Martin Center for Nonproliferation Studies, (2009).

was given in President Abdullah Gül's speech given on the occasion of the opening session of the Turkish Parliament on 1 October 2012, in which he clearly referred to the WMDFZ process and reiterated Turkey's willingness to bring a new dynamic to the process. In parallel, Turkey also espoused a leadership role within the Non-Proliferation and Disarmament Initiative, an ad hoc group established by the Non-Nuclear Weapons States in the wake of the 2010 NPT Review Conference with a view to advance the action plans agreed at said Conference.

Key Recommendations

Amid the ongoing wave of change in the region, the conference will be the first official regional gathering to include newly formed governments subsequent to the Arab Spring. In the words of Maged Abdelaziz, Egypt's UN ambassador, the conference will hopefully be 'a good opportunity for Israel to start getting rid of its nuclear weapons, and for Iran not to get nuclear weapons, and for the Arabs to join the chemical and biological conventions'.[31] For a smoother WMDFZ process, several guiding principles need to be identified and will hopefully be agreed upon at the 2012 conference.

1. Pursue confidence-building measures in all steps of the process to address the chronic insecurity endemic to the region.
2. Prevent the singling out of states; break the isolation of Israel, Iran and others; and stimulate dialogue byusing existing or establishingnew regional organizations.
3. Protect the right of all states to pursue nuclear and other research for civilian purposes, promote cooperation on the civilian use of nuclear energy and defensive biochemical technologies.
4. Avoid linking the WMDFZ process with the Israeli-Palestinian issue and the Arab-Israeli conflict.
5. Encourage a wide range of unilateral, bilateral or multilateral de-proliferation efforts; create enough room for states to pursue parallel processes that would complement the spirit of the WMDFZ in the Middle East.
6. Promote the establishment of regional verification and monitoring tools and institutions in addition to the NPT and the IAEA.
7. Include all states in the region inthe discussions and allow a flexible schedule for joining the regime, similar to the example of the Tlatelolco Treaty.
8. Seek full compliance of WMD-possessing and WMD technology supplier states; involve them in the process in order to address regional insecurities originatingfrom their capacities; and stop the transfer of nonconventional military assets to the region.
9. Synchronize policies of co-sponsor states in order to balance carrots and sticks against any existing or future proliferator.
10. Appoint a UN representative tasked with overseeing the process and making sure that the parties abide by the guiding principles.

[31] http://www.nti.org/gsn/article/middle-east-unrest-could-harm-wmd-free-zone-talks/

The Regional Security Architecture and Other Confidence Building Measures

PETER JONES[*]

Introduction

The question of creating a regional WMDFZ in the Middle East has taken on much greater urgency since the 2010 NPT Review conference. Unfortunately, in public at least, the basic positions which contributed to demise of the Arms Control and Regional Security Working Group (ACRS) almost twenty years ago remain: whether to pursue disarmament first, or whether a lengthy period of gradual confidence-building and regional political change is a necessary precursor to disarmament.[1]

Sometimes lost in this debate, which has an unfortunately "zero-sum" quality, is the deeper question over the broader regional arrangements that will be necessary to support a WMDFZ. For, in looking at the NWFZ's that already exist, it is striking that not one of them exists in the absence of a regional architecture for cooperation and security. Disarmament does not take place in a political and diplomatic vacuum; it requires a wider context of predictability and trust in relations and this takes time to nurture and develop.

What is meant by "a regional architecture"? In essence, it is the creation of an ongoing process whereby the regional countries develop norms and mechanisms to assist them in managing their relations. Europe, the Americas, Africa and Asia all have such architectures. They involve the creation of norms of conduct which are then subject to ongoing review and implementation in a co-operative fashion. It is important to note that these regional architectures all began modestly and evolved; no regional process was born fully formed.

The intended objective of these systems is to assist the states of each region in creating a greater degree of stability and predictability in their relations in order to help prevent conflict. In doing so, each process has laid the ground for a fundamental reconsideration of basic security policies and assumptions in its region, including the eventual renunciation of WMD options. These processes have thus played a key role in defining those regions, both to themselves, and to the rest of the world. Some of these processes have helped the societies in those regions to manage difficult transitions.

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Peter Jones was Desk Officer for Canada's involvement in ACRS in the Department of Foreign Affairs and International Trade and has been involved in numerous regional Track Two projects since then. He served as Project Leader of the Middle East Regional Security and Arms Control Project at SIPRI from 1995-1999.

[1] For various perspectives on ACRS see, amongst others: N. Fahmy, *Special Comment*, Disarmament Forum, no. 2, (2001), pp. 3–5; B. Jentleson, *The Middle East Arms Control and Security Talks: Progress, Problems and Prospects*, IGCC Policy Paper no. 2, Los Angeles, CA, University of California, (1996); P. Jones, *Arms Control in the Middle East: is it time to renew ACRS?* Disarmament Forum, no. 2, (2005), pp. 56-62; P. Jones, *Negotiating Regional Security in the Middle East. The ACRS Experience and Beyond, Journal of Strategic Studies*, vol. 26, no. 3, (2003); and E. Landau, *Arms Control in the Middle East: Cooperative Security Dialogue and Regional Constraints*, Brighton: Sussex Academic Press, (2006).

This brief paper will examine the issue of what kind of regional architecture will be necessary to support the goal of creating a WMDFZ in the Middle East.[2] It will propose some thoughts as to how to get there, over time. This last point is especially important; this will be lengthy enterprise of small steps, especially initially, towards great goals.

Section 1: Principles for a Regional Architecture to support a WMDFZ in the Middle East

The Middle East is characterized by multiple, overlapping rivalries and security challenges. There has historically been enormous mistrust (and not only on the Israeli-Arab level). It cannot be forgotten that the region is the only one where WMD have actually been used since 1945, and there have been several attempts to clandestinely develop WMD options, including by some regional countries in direct contravention of their international treaty obligations. Finally, the events of the past 18 months show that the region is in considerable flux, both socially and politically.

This is not the best of environments in which to embark upon the creation of a WMDFZ. But all of these factors also make the creation of such a Zone of critical importance. The legacy of mistrust and rivalry, and the current upheavals in the region suggest that the creation of a WMDFZ will be a long and slow process of developing trust and predictability, both in terms of specific WMD issues, and more generally.

This process will have to be founded and developed according to some key principles. After many years of study and reflection, I believe the following are vital.

Principle 1 – An Inclusive Process

The first key principle is that of **"inclusion".** There are two dimensions to inclusivity: *membership*; and *agenda*. In terms of *membership*, **it is generally agreed that the region should be defined as the states of the Arab League, plus Iran and Israel and with some form of close association for Turkey.** It is likely that not all of these countries will join the process at the outset, but a seat must be left for them when they are prepared to commit themselves to the norms of the process. How then to begin if not everyone will be prepared to join official discussions at the same time?

Another issue to do with inclusivity as regards membership is the question of whether extra-regional partners can be included and how that would be done. These would be countries which have interests in the region and whose support is vital if a Regional Co-operation and Security process is to work. **These extra-regional partners would likely include some combination of the interlocking memberships of the G8,[3] the P5[4] the UN, and the EU <u>as</u>**

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[2] There have been several books and papers published on the idea of a regional security architecture for the Middle East. For a selection see: P. Jones, *Towards a Regional Security Regime for the Middle East. Issues and Options*, Stockholm: Stockholm International Peace Research Institute, (1998),(republished with an extensive new afterword in 2011), available at: http://books.sipri.org/product_info?c_product_id=434; P. Jones, Structuring Middle East Security, in: *Survival, Journal of the IISS*, vol. 51, no. 6, December, 2009 – January, 2010; S. Feldman and A. Toukan, *Bridging the Gap: A Future Security Architecture for the Middle East*, Lanham, MD: Rowman and Littlefield, (1997); and the collection of essays in the 2003 special issue on Building Regional Security in the Middle East: International, Regional and Domestic Influences, in: *The Journal of Strategic Studies*, vol. 26, no. 3, (2003).

[3] Canada, France, Germany, Italy, Japan, Russia, the UK and the US.

[4] China, France, Russia the UK and the US.

institutions.[5] This constellation constitutes the groupings of the key economic, political and military powers in the world and its members will all have important contributions to make to the region in security, economic and political terms.[6] Having the Extra-regional Partners included in the process explicitly recognises that these powers are part of the region's dynamic and also establishes norms as to how these partners interact with the region. Indeed, one of the key objectives of this process might be to establish a new partnership between the region and the outside powers; one based on a new set of understandings and rules of conduct which apply to both sides. Finally, it will be necessary include in the process those states proximate to the region on issues where their presence is relevant.

Turning to the *agenda*, **the concept of inclusivity means that every issue which is of concern to every regional state must be on the agenda**. However, there is an interplay between what issues can productively be discussed at what levels and who agrees to join the discussions. For example, if one of the key states rumoured to have, or be seeking, Weapons of Mass Destruction refuses to join the discussion over that issue, it will be difficult to have conclusive discussions on this question at the official level.

Furthermore, while all issues should be on the agenda in theory, the official process should probably, to begin with, choose some specific issues for early work which hold out the prospect of success – an idea expressed by some as "begin with what you can begin with." Obviously, this raises the issue of the wider regional expectations of the process. If the agenda deliberately avoids the toughest issues, many will regard the process as not serious, but if it tackles the hardest issues right away, failure is likely. The need is to develop an agenda for the process which includes the hardest issues, but recognises that they will take time, and that there are other issues which can be tackled in the nearer term while discussions about the longer term issues are ongoing.

It is suggested that certain clusters of issues could be developed, with each being discussed in an appropriate forum, and with some having objectives that could be realised earlier than others. There are many ways to identify those issues which will be the subject of dialogue at different levels of the process. One is to try to develop a set of commonly perceived <u>concerns</u> in the region and then to structure dialogue around trying to find ways to address those threats.

Specific ideas for discussions over WMD issues are mentioned in Annex 1.

Principle 2 – A Multi-layered Process

The second key principle has to do with the structure of the process. As noted above, there will be some states unlikely to join an official process at the outset, and some issues probably cannot productively be discussed there. How, then, to have an inclusive process from the outset? Discussions in various fora have developed the notion that this new process could benefit from **inter-related levels of dialogue**. The first will be Track One, Government-level discussions. These, initially, should be low-key, "issue and results oriented," and will go on between those states in the region willing to talk to each other, and invited extra-regional states and institutions. The usual diplomatic conventions, such as consensus decision-making, are likely to apply. A large, formal Secretariat structure should be avoided in the

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[5] This means that the Secretariats of these bodies would be invited to participate, not all of their individual members. The latter would render the process completely unwieldy.

[6] Of course, it will be necessary to decide what role the extra-regional partners would play in such areas as decision-making and the financing of the process.

early stages. A seat would left open for those who wished to join later. The key principle here is that the agenda will be initiated and developed by those parties operating within the process.

The second tier would be some sort of institutionalised Track Two process. This track would deal with issues which were not yet ready for inclusion on the official track, but on which focused, long-term, expert discussion could prepare the ground for eventual inclusion in the official talks. Officials could participate in these discussions, in their private capacities. This track could include institutes and individuals from the region and beyond, according the subject to be discussed in each case. It might require a modest Secretariat, procedures to report to Track One, and financial support from both regional and extra-regional states and foundations.[7]

The third tier would be a more loosely structured track designed to encourage discussion by civil society groups of issues not yet ready for inclusion in the above tracks, such as regional discourse on wider issues related to reform and democratic development.

Principle 3 – "Geometry Variable"

The third key principle is that of **"geometry variable."** If this is to be a multi-layered process, the membership and topics to be discussed will vary by level. It may be that only certain states will be prepared to join the official layer for the time being. However, the structured Track Two layer could have many more members, including from countries that do not yet formally recognise each other. Because of the current situation in the region, dialogue mechanisms will have to be developed in a flexible manner according, at least in the early years, to this concept of **"geometry variable."** This idea holds that different issues will be discussed in different fora (some official; some structured Track Two) and at different rates of speed, according to the requirements of the topic at hand. Different constellations of actors may attend different discussions, but the whole will be bound together by an overarching framework of principles and objectives. This raises the question of who might be the core states necessary to get the process going. There is no obvious answer to this question; much will depend on who steps forward to lead.

Principle 4 – Decision-making Mechanisms

The fourth key principle has to do with **decision-making mechanisms.** The only way this process could work at the official level is by consensus – no regional government will surrender its right to veto proposals that could affect its basic interests. But different interpretations of the concept of consensus have emerged over time in different regions which permit some flexibility. It will be necessary to consider how this might work in the Middle

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[7] The idea of creating a Track Two process on regional security matters to complement and assist Track One is discussed in P. Jones, *Structuring Middle East Security*, op cit, and P. Jones, *Towards a Regional Security Regime*. op cit. The role of Track Two in regional security discussions is further assessed in: P. Jones, Filling a critical gap or just wasting time? Track Two diplomacy and regional security in the Middle East, in: *Disarmament Forum*, no. 2, (2008); D.D. Kaye, *Talking to the Enemy. Track Two Diplomacy in the Middle East and South Asia*, Santa Monica: RAND Corp, (2007); E. Landau, *Arms Control in the Middle East. Cooperative Security Dialogue and Regional Restraints*, Eastbourne: Sussex Academic Press, (2006), chapter 2; P. Jones, Track II Diplomacy and the Gulf Weapons of Mass Destruction Free Zone, in: *Security and Terrorism Research Bulletin*, Issue 1, October, 2005, Dubai: GRC, (October, 2005), at: http://www.grc.ae/bulletin_WMD_Free_Zone.pdf; See also: H. Agha, S. Feldman, A. Khalidi, and Z. Schiff, *Track II Diplomacy: Lessons from the Middle East*, Cambridge: The MIT Press, (2004); and D.D. Kaye, Track Two Diplomacy and Regional Security in the Middle East, in: *International Negotiation: A Journal of Theory and Practice*, 6, 1 (2001).

East, though firm adherence to consensus in its most narrowly defined sense will likely be required at the outset, certainly in discussions at the official level. Associated with this issue is the need for participants in such regimes to focus on their objectives and find ways to get out of "bad diplomatic habits" (UN-style negotiating over texts, over-reliance on procedural games to score tactical points, etc.) and focus on the achievement of agreed objectives. At the Track Two level, much greater flexibility is possible. More controversial issues may be broached in an atmosphere where participants' countries are not committed to a particular outcome. There is a need in the Middle East for a network of institutes and centres which can contribute to this kind of dialogue.

Principle 5 – Regional and Sub-regional Dimensions of a WMDFZ Process

The fifth key principle has to do with **the relationship between the proposed new process and other, existing bodies**. In other regional cases (such as the ASEAN and CSCE/OSCE), other multilateral bodies co-existed, and evolved with those processes. Some of these were military alliances, like NATO and the Warsaw Pact. Others were economic and political bodies, such as the EU, APEC and others. The key to success was for each of these bodies to take the attitude that they were not in competition; that their basic objectives were complimentary in many ways; and to find ways through which they could work towards mutually held aims (or at least not get in the way of each other's aims). In the Middle East case, there are already inter-state bodies, groups and initiatives, such as the Arab League, the Maghreb Arab Union, the Gulf Co-operation Council and others. If a wider regional Co-operation and Security process is to be developed in the Middle East, it will likely evolve in a way which fills niches that these standing bodies do not already fill. It will also be necessary in the Middle East case to consider how sub-regional dynamics might impact upon the creation of a region-wide process. Hence, there is a need to consider the question of how each level of interaction can assist the others.

As a basic standpoint, a Middle East WMDFZ will require the creation of a region-wide security architecture, even as other processes would continue to exist and should be encouraged. Some have argued that it might be better to concentrate on sub-regional dialogues in the first instance, particularly in the Persian Gulf, and avoid for now discussions of a region-wide process. The creation of a broader, region-wide process could then emerge from an interlocking web of sub-regional processes.[8] Though there is validity to this in conceptual terms, the Middle East needs to develop both sub-regional and region-wide dialogues; there are some issues best dealt with in one forum or the other, but there are some issues which have both sub-regional and region-wide dimensions. It is not an "either/or" proposition; it is a question of doing both simultaneously. Experience has shown that the question of a regional Weapons of Mass Destruction-Free Zone requires a region-wide approach.

Thus, one could stand on its head the argument that concentration exclusively on sub-regional dialogues is a way to avoid region-wide differences and thus make progress on certain agenda items. Simply put, having both region-wide and sub-regional dialogues going on simultaneously could be a way to allow the sub-regional dialogues to go forward in those areas where progress can be made without the intrusion of region-wide issues as an "excuse"

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[8] See, for example, the different ideas proposed in M. Yaffe, The Gulf and a New Middle East Security System, in: *Middle East Policy Journal*, vol. XI, no. 3, (Fall 2004), and J.A. Russell, Searching for a Post-Saddam Regional Security Architecture, in: *MERIA Journal*, (March 2003).

to avoid decisions. In other words, the region-wide process would serve to "insulate" the sub-regional dialogues from charges that progress on this or that subject is not possible sub-regionally until wider regional issues are being addressed. The key is to find a way in which region-wide and sub-regional agendas can go forward together and complement each other.

Principle 6 – A WMDFZ Process and the Peace Process

A final key principle, has to do with **the relationship of any effort to begin a regional WMDFZ process in the Middle East and the question of the Arab-Israeli Peace Process**. Central to this issue is the question of whether the region has to wait until all of the major problems (and particularly the Arab-Israeli issue) are resolved before tackling the WMDFZ issue and launching such a Co-operation and Security process, or whether that process can develop as these other issues are being resolved and possibly contribute to their resolution. In this context, the question of whether this process should take a key role in facilitating the resolution of the Israeli-Palestinian dispute arises. One way forward is to take the view that such a regional process could assist the peace process in some ways, but should not try to replace it. Instead, it should seek to develop a larger view of the regional situation and initiate steps to tackle at least some of those issues. Solving existing problems while also looking ahead is not contradictory.

Though it is difficult, the lesson from other regions is that the creation of a regional architecture should go forward with a commitment from regional governments that they will not allow the inevitable ups and downs of the peace process to derail the broader discussions. This will require leadership from some regional governments to ensure that the daily vicissitudes of public opinion do not block the process. It also argues for a quiet approach which eschews attempts to court press or public attention, at least for the first while.

Section 2: Getting Started and Keeping up the Momentum

As an initial set of tasks to be tackled, the process should recognise that it will need to examine both WMD issues and also broader questions of regional stability. As noted at the outset of this paper, a WMDFZ will not magically appear in a region which is otherwise unstable and dangerous. Thus, the process could also concentrate on the following issues in the following broadly thematic areas, according to the concept of "geometry variable," it being recognised that "success" does not necessarily mean the achievement of a "solution" to all of these issues, but that intensive dialogue to better manage their effects and develop possible longer term solutions can be an important element in setting the stage of their eventual resolution:

"WMDFZ issues"

  • Various measures and studies as outlined in Annex 1.

"Other Security issues:"

  • Confidence and Security-building measures in the conventional military sphere;

- Discussion of the broader regional security implications relating to specific conflicts such as the Arab-Israeli dispute and the situation in Syria;
- Other issues of concern (e.g.: criminal activity which has a security dimension); and
- Other issue(s) to be agreed.

"Soft Security:"

- Environmental co-operation;
- Discussion of political developments in the region;
- Gender issues in the region;
- Public Health co-operation; and
- Other issue(s) to be agreed.

Economic Development:

- Exchanges on "best practices" in economic policy and projects;
- Transportation infrastructure projects;
- Energy infrastructure projects;
- Youth training infrastructure projects; and
- Other issue(s) to be agreed.

The inclusion of Economic and Soft Security questions is deliberate. In the other regional cases, considerable attention has been paid to economic and social interaction and development as a separate objective of these regional security and cooperation processes; it has never been simply about "security," narrowly defined. This was not done uniformly, nor has perfection been achieved. But in each case, the participants have realised, sooner or later, that these processes could not exclude these issues. In the current world of increased globalisation these considerations will arise for any region starting out on the path of a regional process. Given the changes sweeping the Middle East, a way must be found to include these ideas within a Middle Eastern regional architecture in such a way as to make them acceptable.

But much needs to be done to address what the region means by them and how they can be integrated into the agenda in such a way as to make them "acceptable" to regional governments. It is perhaps useful to recall the point that "hard" and "soft" security are two sides of the same coin. They must both be dealt with, and discussions and decisions about "soft" mechanisms can be useful in helping to prepare the ground for real, long-term change in the region. One way forward might be to look in each area above for subjects on which there might be agreement by at least some regional players to proceed and to develop ways to discuss these ideas within the framework of "geometry variable." Not all issues might be discussed on the official track in the first instance, but productive, results oriented discussions could take place in other fora. It would also be necessary to identify areas where there is disagreement and to design mechanisms for intensive discussions at the appropriate level to assist in preparing the subject for the day when it might be transferred to another level.

Conclusion – Small steps towards great goals

None of this will be terribly satisfying to those who want to see the creation of a WMDFZ in the Middle East right away. Their frustrations are understandable, but simply expressing those frustrations in such a way as to make a stand-off inevitable is not going to make progress possible on any of the key issues. In every other region where tangible progress has been made on the elimination of WMD the process took decades; a few key states stepped forward to lead and others joined in later; other critical differences were ongoing even as the WMD process was underway (and no one took the view that disarmament discussions could not progress until their particular view of another specific question was accepted by all); and all states of the region eventually came around to the view that a wider regional process for cooperation and security was an essential component in the creation of the Zone.

Twenty years ago the Middle East had a dialogue at the official level over arms control and security issues. ACRS was not perfect by any means, but it was a start and it could have grown if it had been given time. Instead, various players took essentially "zero-sum" positions and ACRS was allowed to die. We've wasted twenty years since ACRS demise; two decades that could have been spent developing ideas. The process launched by the 2010 NPT Review Conference represents an opportunity to start something once again. Let us hope the region will not waste another opportunity.

Annex 1

Possible areas for CBM discussions at the Track One and Two levels in support of a Middle East WMDFZ process (some of this work is already ongoing, but it can be brought within a single process under the 2010 NPT process). This list is illustrative only; it is not meant to be exhaustive.

Biological:

- Development of standards for the peaceful uses of biological science and technology in the region (following BWC article X), perhaps leading to discussion of a regional Code of Conduct for work in this area;
- Information sharing on relevant activities, as described in the BWC;
- Regional experts study on verification techniques and lessons from various historical cases (e.g.: UNSCOM);
- Establishment of regional cooperation for disease surveillance (both human and animal).

Chemical:

- Regional experts study on verification lessons from other cases;
- Development of standards for the peaceful operation of chemical industries in the region, perhaps leading to discussion of a regional Code of Conduct for work in this area;
- Development of cooperation in the field of environmental standards and protection.

Nuclear:

- Development of regional standards for the safe and transparent development of peaceful nuclear capabilities, such as power generation (drawing on relevant international agreements as appropriate);
- Development of regional standards for the safe and transparent handling and storage of nuclear waste (drawing on relevant international agreements as appropriate);
- Development of a regional agreement for assistance in the case of a nuclear accident (drawing on relevant international agreements as appropriate);
- Development of a regional inspection and verification model for a Middle East without nuclear weapons (drawing on relevant international and regional agreements as appropriate);
- Regional experts study on nuclear weapons dismantlement technologies (such as the recent Norway-UK project);
- Development of regional verification cooperation mechanisms relevant to the Comprehensive Test Ban Treaty, in cooperation with the CTBO.

Delivery Systems:

- Regional experts study on the relevance for the Middle East of proposals made in other regional contexts for limitations on methods of WMD delivery;
- Regional experts study on the relevance for the Middle East of missile test notification agreements (such as the India-Pakistan agreement);
- Regional experts study on historical cases of delivery system dismantlement (e.g.: INF dismantlement under the INF Treaty).

General and Political:

- Regional experts study on no-first use agreements and their applicability to the Middle East;
- Regional experts study on other regional NWFZ cases and their applicability to the Middle East;
- Establishment of a regional communications network for the sharing of notifications and other information relevant to a WMDFZ;
- Regional experts study on non-attack agreements and their applicability to the Middle East (e.g.: India-Pakistan agreement on non-attack on nuclear facilities);
- Regional experts study on conventional CBMs and arms control measures which could assist in the creation of a WMDFZ.

Making Peace Attractive: Emphasizing the Gains of a Negotiated Agreement between Israel and the Palestinians

CLAUDIA BAUMGART-OCHSE[*]

Negotiations between Israel and the Palestinians have been stalled ever since the failed attempt to revive talks in January 2012 in Amman under the auspices of Jordanian King Abdullah II. The meetings in the Jordanian capital had been demanded by the Middle-East Quartet (UN, EU, US and Russia) in order to re-establish the bilateral track of negotiations after the Palestinian Authority's (PA) bid to become a member state of the UN in September 2011 was rejected. Yet the talks did not bring the parties closer to an agreement. Netanyahu's envoys presented to the Palestinians what looked roughly like the offer which the Israeli government had made in the wake of the Annapolis conference regarding borders and settlements. The Palestinian team upheld the precondition that Israel freeze its settlement activity in the West Bank prior to serious peace negotiations. After just five sessions, the talks ended with no results.[1]

In Western media, the Amman meetings were hardly mentioned at all. Both internationally and in the region itself, the peace process between Israel and the Palestinians seems to have been put on the back burner. Other developments have absorbed the public's and the politicians' attention alike. The Arab Spring, the intervention in Libya, the massive violence in Syria, and most notably the confrontation with Iran over its nuclear programme: the Middle East is changing at a pace and on a scale that is unprecedented, and the outcomes of these processes seem to be entirely unpredictable.

Yet despite these upheavals, the Israeli-Palestinian conflict will continue to leave its mark on the region by providing a bone of contention that resonates in one way or another with all other dimensions and levels of enmity and conflict in the Middle East. Beyond the actual situation in Israel/Palestine, this core conflict has for decades served to draw the line between friends and foes in the region and beyond, formed public opinion, and fuelled numerous instances of violence and war since the days of the British Mandate in Palestine. Even if new and possibly democratically elected rulers assume power in the Arab states, there is a good chance that this basic divisive configuration will stay in place and continue to generate hostility and distrust if no serious effort is made to solve the Israeli-Palestinian conflict.

Therefore, if the attempt to establish a Weapons of Mass Destruction Free Zone in the Middle East (MEWMDFZ) is not be a futile endeavour, it has to be accompanied by a political process that envisions a solution to the Israeli-Palestinian conflict. This paper argues that external mediators should seek to set incentives and emphasize the gains which both conflict parties would derive from a peace deal instead of focusing on nothing but the problems and painful concessions. To be sure, both parties will have to concede ground for a solution; but they will only do so if they can clearly see what they will get out of it. And these

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[1] Barak Rivkin, Netanyahu's border proposal. Israel to annex settlement blocs, but not Jordan Valley, in: *Ha'aretz Online*, (19 February 2012), www.haaretz.com.

gains have to be communicated both to the political elites and to the societies at large on each side. The paper proceeds as follows. The first part discusses the main goals and strategies of both Israel and the Palestinians. Both parties have recently abandoned the negotiating table and sought alternative, unilateral strategies. In the second part, some ideas will be presented of how the Middle East Quartet could set incentives for the parties to overcome the current stalemate and return to negotiations instead of pursuing unilateral policies.

What the conflict parties want

From Israel's point of view, security is the top priority. Almost twenty years ago, the late Asher Arian diagnosed this preoccupation as Israel's 'religion of security.'[2] The historical roots of this perception of being permanently under threat reach back to the Jewish experience of anti-Semitism in Europe and elsewhere, eventually culminating in the horrors of the Holocaust; and it has been reinforced by the Arab states' hostility towards the Jewish state in their midst ever since the British promised the Jews a homeland in Palestine. For a short moment in the mid-1990s, it seemed as if the Rabin government had succeeded in reformulating Israel's identity from that of 'the people apart'[3] to an open-minded, liberal democracy which reached out for peace with its neighbours. But spoilers on both sides – radical groups such as Hamas and the Jewish settlers – successfully torpedoed the Oslo peace process. The outbreak of the Second Intifada finally dashed all hopes of a negotiated solution.

Since then, the religion of security is adhered to even more fervently. Israel's policies to enhance its security encompass various elements. In order to fend off terrorist attacks, the government decided to build the controversial security wall around the West Bank, which in some sections cuts deeply into Palestinian territory.[4] Following the takeover by Hamas in Gaza, Israel imposed a full blockade of the strip. In two recent wars, Israel has attempted to eradicate Hezbollah in Lebanon (2006) and topple Hamas rule in the Gaza Strip (2008/9). Beneath the level of outright war, Israel has complemented its deterrence strategy with low-intensity warfare in Gaza as well as in Lebanon.[5] At the same time, the military administration has eased security restrictions in the West Bank and strengthened its security co-operation with the PA, thereby allowing for a moderate economic recovery[6], which in turn helped to dampen terrorist activity. In 2007, the Israeli air force bombed a Syrian nuclear installation. Currently, there is much debate internationally on whether Israel is about to do the same in Iran. And above all, there is no indication that the Israeli government plans to abandon its own nuclear capabilities any time soon.

There are, of course, other goals than security. One is to preserve the Jewish majority in the State of Israel in order to maintain its democratic political system while at the same time preserve its Jewish character. Another is to keep a comparatively strong economy in an

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[2] Asher Arian, *Security Threatened. Surveying Israeli Opinion on Peace and War*, Cambridge/ New York: Cambridge University Press, (1995).

[3] Ibid.

[4] See International Court of Justice, *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory. Jurisdiction of the Court to give the Advisory Opinion Requested*, New York (2004).

[5] See Zeev Maoz, *Defending the Holy Land. A Critical Analysis of Israel's Security & Foreign Policy*, Ann Arbor: University of Michigan Press, (2006).

[6] See e.g. Office of the UN Special Coordinator for the Middle East Peace Process, *Palestinian State-Building. A Decisive Period,* Ad Hoc Liaison Committee Meeting, Brussels, (13 April 2011).

otherwise lesser developed region of the world. Yet in the end, all other goals are nevertheless intertwined with Israel's overarching security concerns.

The Palestinians, on the other hand, want an independent state – which, by definition, implies the end of the occupation. Although the word 'state' was not mentioned in the original Oslo accords, the peace process in the 1990s was widely perceived as kicking off a long-term process of state-building in the territories by establishing the Palestinian Authority (PA). Yet the PA's actual authority has always been limited. The Palestinian territories were divided into three zones, with only zone A (Palestinian cities) under full Palestinian control. And throughout the West Bank, the Israeli government continued to build and expand Jewish settlements, thereby diminishing Palestinian hopes for the territorial contiguity of a future state. In the end, just as on the Israeli side, all expectations were frustrated when violence returned.

Since the Second Intifada, Palestinian politics have been predominantly characterized by the split between Fatah and Hamas. In 2006, Hamas won the national elections. After attempts at establishing a consensual government, the Islamist organization violently seized power in the Gaza strip in 2007. Fatah remained in power in Ramallah. The factions pursue utterly different strategies in order to bring the occupation to an end. Hamas, though it certainly has undergone major changes since its formation as the Muslim Brotherhood's militant offshoot in the late 1980s, still refuses to fully accept the existence of the State of Israel and has repeatedly returned to violence. Fatah, on the other hand, has most of the time chosen the path of negotiations with Israel. Yet the recent stalemate in the talks with Israel and the upheavals in the region have prompted the Fatah government to change its course of action. In 2009, Prime Minister Salam Fayyad proposed to build the institutions of a future state from the bottom up in two years' time instead of waiting until after an agreement with Israel was signed; and President Abbas followed suit and applied for Palestine to become a member state of the United Nations in September 2011, which caused a considerable row in the Security Council. The bid for UN membership was rejected, but the Palestinians succeeded in securing for themselves membership in the UN's cultural organization, UNESCO. Furthermore, Abbas has announced that the PA plans to seek non-member observer status at the UN in November 2012.

Both Israel and the Palestinians have successively veered away from negotiations in recent years and opted for unilateral measures in order to pursue their respective goals. And both parties have in fact achieved partial successes. In Israel, the number of terror attacks originating from the territories has decreased considerably over the past few years. In Palestine, Prime Minister Fayyad's plan to build state institutions has produced tangible results which have earned much praise from the international donors who are the major financers of the Palestinian Authority.[7] But these successes may be built on thin ice: if Palestinian aspirations to statehood are frustrated time and again and the spirit of the Arab revolutions spills over into the territories, a new wave of violence cannot be ruled out.

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[7] World Bank, Sustaining Achievements in Palestinian Institution-Building and Economic Growth, in: *Economic Monitoring Report to the Ad Hoc Liaison committee*, (09/18/2011).

Emphasizing the Gains of a Peace Agreement

The above-mentioned goals of the parties – security for the State of Israel, an end of the occupation and an independent state for the Palestinians – entail, of course, a host of complicated issues which have to be tackled if a solution is to be sustainable: the status of Jerusalem, the return of Palestinian refugees, determining the exact borders between Israel and a future Palestinian state, and the issue of the Jewish settlements in the West Bank and in East Jerusalem. These so-called final-status issues are just the most prominent ones.

Yet in fact, all of these issues, every single detail of them, have been discussed in-depth by Israeli and Palestinian representatives over the last 20 years. Countless rounds of negotiations between the parties in Oslo, Camp David, Taba, and Annapolis produced progress and even understandings on many of these issues. External mediators and organizations presented important documents which could serve as blueprints for a new round of talks, most notably the Clinton parameters[8], the Road Map to Peace,[9] and the Saudi Peace Initiative (Beirut Declaration).[10] Therefore, if negotiations are resumed, then external mediators should urge the participants to start at the point where previous talks arrived – and not go back to square one yet again. Among the understandings that have been reached are land swaps, evacuation of settlements which are not to be annexed by Israel within the land-swap framework, the designation of the Arab neighbourhoods of East Jerusalem as Palestine's capital, and Palestine's status as a demilitarized state. Once back on track, negotiations should furthermore follow the advice of Gilead Sher, former chief of staff of Ehud Barak: they should be 'based on a "what has been agreed will be implemented" principle. This will replace the "nothing is agreed until everything is agreed" formula and smoothen the path towards transitional arrangements and partial, gradual agreements'.[11]

But if everything has already been discussed between the parties, why is it so difficult to achieve substantial progress? And what could be the role of external parties in restarting negotiations? In an interview in 2010, President Barack Obama looked back at his first year in office and said that it was true that his administration's policies in this respect 'didn't produce the kind of breakthrough that we wanted, and if we had anticipated some of these political problems on both sides earlier, we might not have raised expectations as high.'[12] The interview was held after the failed attempt to demand a settlement freeze from Netanyahu and persuade Abbas to return to the negotiating table. Obama's remark referred to both parties' problems in mustering support internally for their peace policies. Both the Palestinians and the Israelis have to weigh their decisions in the peace process against the risk of upsetting and estranging their coalitions and constituencies. But what follows from this insight?

First, future efforts by external parties towards a resumption of negotiations should emphasize the gains which both parties would make from an agreement instead of solely focusing on the problems and necessary painful compromises. By and large, these gains must correspond to the parties' main goals, that is, a Palestinian state and Israel's security. In order

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[8] Muriel Asseburg, Materialsammlung zum Friedensprozeß im Nahen Osten. Anlageband zur Studie "Die EU und der Friedensprozeß im Nahen Osten", in: *Stiftung Wissenschaft und Politik / Deutsches Institut für Internationale Politik und Sicherheit, SWP-Studie*, Nr. 28, Berlin, (2003), pp. 23-24.

[9]   www.mfa.gov.il/MFA/Peace+Process/Guide+to+the+Peace+Process/A+Performance-Based+Roadmap+to+a+Permanent+Two-Sta.htm

[10] www.mfa.gov.il/MFA/Peace+Process/Guide+to+the+Peace+Process/Beirut+Declaration+on+Saudi+Peace+Initiative+-+28-.htm

[11] Sher Gilead, *Steps Israel should take to control its destiny*, (11 October 2012), www.jta.org.

12 See www.time.com/time/politics/article/0,8599,1955072-6,00.html.

to strengthen the parties' confidence that negotiations will in the end bring them much closer to the realization of their goals, the format of negotiations will have to be different from previous ones. On the one hand, the US as well as the other members of the Quartet (EU, UN, and Russia) will have to express their firm commitment to Israel's security and step up their measurements to curb terrorist violence and rocket fire from the territories and from Lebanon. Much has been done in this direction already, especially regarding security sector reform in conjunction with Fayyad's state-building programme, but in order to set incentives for Israel, more would be better. In addition, the EU could offer help in relocating and compensating the settlers who have to leave their homes in the West Bank settlements.[13] With regard to Palestinian statehood, the Quartet should promise to approve Palestinian membership of the UN as soon as a certain stage of negotiations has been reached. This would complement the concrete efforts on the ground, which were generously funded by the US, the EU and other foreign donors, with symbolic politics that mean a lot to the Palestinians.

On the other hand, it will be necessary to widen the negotiation format and integrate the Arab states. The Beirut Declaration of the Saudi peace plan of 2002 is a landmark document which, for the first time, offers Israel normal relations with all Arab states if it withdraws to its pre-1967 borders and accepts a Palestinian state in Gaza and the West Bank with East Jerusalem as its capital. Despite their best efforts, the members of the Quartet will not be capable of fully guaranteeing security for Israel and an independent state for the Palestinians. Only the Arab states may be able to span a regional safety net for both parties, as former Jordanian Foreign Minister Marwan Muasher writes: 'For Palestinians and Syrians, it provides Arab cover for painful compromises (refugees and Jerusalem for Palestinians, modifying the relationship with Iran and Hezbollah for Syria). For Israelis, it convinces them that they are getting regional peace and security and that the agreement is not just a separate peace deal with half of the Palestinians or one with Syria that lacks a solution to Israel's security needs'.[14] By promising security for Israel, the Arab states would take responsibility for disarming groups such as Hamas and Hezbollah and turning them into purely political organizations. Concerning the MEWMDFZ, the Beirut Declaration does not set Israel's nuclear disarmament and accession to the Nuclear Non-Proliferation Treaty (NPT) as a precondition for offering normal relations. This allows Israel to first negotiate a comprehensive peace agreement within a wider Arab framework, and as a second step to reconsider its nuclear posture and join a MEWMDFZ once a settlement has been achieved.

Second, any attempt at reviving negotiations should entail a major public diplomacy effort. One of the most severe mistakes of the Oslo peace process was neglecting public diplomacy. Neither the Palestinian nor the Israeli leadership sufficiently conveyed to their societies how a peace agreement could change their daily lives and the lives of their children in positive ways. In both societies, there are large majorities who have time and again said in opinion polls that they are tired of the conflict and long for peace. But these moderate majorities are, at the same time, always at risk of being lost to more radical parties in elections if the situation deteriorates and frustration takes hold. Therefore, public diplomacy which explains the envisaged peace dividend is essential if the peace process is to achieve progress. Moreover, in previous instances, both Israelis and Palestinians missed the opportunity to

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[13] An evacuation-compensation plan has been discussed in the Knesset. According to polls, about 30 per cent of those 100,000 settlers that would be affected by a land-swap agreement would accept compensation and relocate. Akiva Eldar, Ramon's settler evacuation-compensation bill is just talk, in: haaretz online, (09/05/08), www.haaretz.com.

[14] Muasher Marwan, Palestinian-Israeli Direct Talks. The Case for a Regional Approach, in: *Carnegie Endowment for International Peace, Policy Outlook*, (24 August 2010).

deliver this message to the staunchest opponents of the peace process, that is, to the spoilers on both sides.

Such public diplomacy could be aided by external actors. Obama's speech to the Arab world in 2009 in Cairo was very well received in Arab societies and set a new tone in US-Arab relations. Unfortunately, Obama did not make such a gesture towards the Israelis in order to explain how his approach to the Middle East could advance their yearning for security. If he is elected for a second term in office, Obama should take the opportunity of not having to fear the next election and give his peace initiative a second try – and talk publicly to both Palestinians and Israelis, in Ramallah and in Jerusalem. The same applies to other leaders of the Quartet, from Secretary-General Ban Ki-Moon to Catherine Ashton. Criticism certainly has to be levelled at both parties if they violate what has been agreed. But the general tone should be one that emphasizes the gains and creates incentives for the political elites and the societies on both sides to embrace the peace process.

The Iran Nuclear Dilemma: The Peaceful Use of Nuclear Energy and NPT's Main Objectives

SEYED HOSSEIN MOUSAVIAN[*]

Despite the fact that, after about four decades, about 190 countries have joined the Non-Proliferation Treaty (NPT); the three main objectives of the treaty have still not been accomplished.

The NPT's three core goals were: *first,* to guarantee complete disarmament of nuclear weapons by the NPT nuclear-weapon States: China, Russia, United Kingdom, France and the United States. *Second,* to prevent the spread of nuclear weapons and technologies related to nuclear weapons and *third,* to ensure cooperation in the peaceful uses of nuclear energy.

Although the five permanent members of United Nation Security Council (P5) have all ratified the NPT, none has fulfilled its commitment under NPT to give up its nuclear weapons. After more than 40 years, they still possess huge stockpiles of nuclear warheads. Currently, Russia and the United States each have about 10,000 nuclear warheads, of which about half are awaiting dismantlement. France has about 300, the United Kingdom about 225 and China about 240.[1]

It is true that the United States, Russia, France and the UK have reduced their stockpiles but significant inventories still remain and the goal of total nuclear disarmament is not in sight.[2] Moreover, by modernizing their arsenals, delivery systems, and related infrastructure they are undermining the objectives of NPT in terms of both non-proliferation and disarmament.[3] Therefore, nuclear disarmament as one of the main objectives of the treaty has not been realized.

To fulfil the goal of non-proliferation, the NPT established a safeguards system as a confidence-building measure and as an early warning mechanism to check compliance with the treaty through inspections conducted by the International Atomic Energy Agency (IAEA). A Comprehensive Safeguard Agreement with the IAEA is in force with 172 member non-weapon states.[4]

The IAEA has been responsible for verifying that member states do not use their nuclear programs for nuclear-weapons purposes. To ensure non-proliferation, the Agency carries out safeguards visits as well as ad hoc, routine, and special inspections. The 'Additional Protocol', which grants the IAEA complementary inspection authority at additional nuclear sites where nuclear materials are not present, has also been accepted by 112 countries. The

[1] http://www.ploughshares.org/world-nuclear-stockpile-report.

[2] Hans M. Kristensen, Robert S. Norris, Nonstrategic Nuclear Weapons, in: *Bulletin of the Atomic Scientists September/October 2012 vol. 68 no. 5 96-104,* http://bos.sagepub.com/content/68/5/96.full.

[3] Rey Acheson, Modernization of Nuclear Weapons: Aspiring to "indefinite retention?, in: *Bulletin of the Atomic Scientists September/October 2012 vol. 68 no. 5 88-95,* http://bos.sagepub.com/content/68/5/88.abstract.

[4] http://www.iaea.org/OurWork/SV/Safeguards/sv.html.

principal aim of the Additional Protocol was to enable the IAEA inspectorate to provide assurances that there are no undeclared activities.

Since the NPT came into force, India, Pakistan and North Korea, the latter a member of NPT which later withdrew, have proliferated and tested nuclear bombs. Israel is also believed to be a weapon state. Except in the case of North Korea, the world powers have established strategic relations demonstrating acceptance of these proliferators. Therefore, the second objective of NPT, non-proliferation, has also not been realized.

The third objective of NPT is to promote cooperation in the field of peaceful nuclear technology and equal access to this technology for all states parties. Article IV of the NPT confirms that all states party to the Treaty have the right to benefit from the peaceful uses of the atom and urges the parties to cooperate with one another in the fullest possible exchange of nuclear equipment, materials, and information for peaceful purposes. Based on Article IV, research, development, and use of nuclear energy for non-weapons purposes are the 'inalienable right' of non-nuclear-weapon states. Based on this article, several member states on NPT including Germany, the Netherlands, Japan and Brazil are carrying out enrichment for peaceful purposes.[5]

Since Iran's 1979 revolution, that country's 'inalienable right' under NPT to enjoy peaceful nuclear technology has been challenged.

The US laid the foundation for a nuclear Iran in the 1960s due to its strategic relation with the Shah. The US provided Iran's first nuclear facility, the Tehran Research Reactor (TRR) in 1967, estimating that Iran would have a full fuel cycle with 23 nuclear power plants by 1994.[6] But after the 1979 Iranian Revolution, even though Iran decided to cancel or reduce the Shah's ambitious nuclear and military projects, the US and the West withdrew from all nuclear agreements and contracts and isolated Iran through sanctions and other means. The US stopped providing fuel rods for TRR, Germany stopped completion of the Bushehr power plant and France suspended an enrichment agreement signed in 1973 in which Iran joined a consortium with Eurodif to enrich uranium in France and for the Tehran Research Reactor and the Bushehr power plant. The US and the West objected to the rights of Iran even to possess civilian nuclear power plants. Even worse, after Iraq's invasion of Iran in 1980, the United States and the West supported Saddam Hussein with material and technology to build and use the chemical weapons that killed and injured thousands of Iranians.

These policies forced Iran toward self-sufficiency. In 2003, shortly after Iran had mastered enrichment technology, its nuclear case came under the spotlight of the International Atomic Energy Agency (IAEA). Iran therefore submitted proposals to assure the international community of the peaceful nature of Iran's nuclear program. In that period, while I was a member of Iran's nuclear negotiating team, we proposed packages that offered to: cap enrichment at the 5 per cent level; export all low-enriched uranium (LEU) or fabricate it into fuel rods; commit to the Additional Protocol and to the updated Code 3.1 of the subsidiary arrangements to the basic safeguards agreement. These would have maximized the barriers to break-out and would have provided the maximum level of transparency. In exchange for these Iranian commitments, we expected the international community to recognize Iran's right to enrichment under NPT and normalize Iran's nuclear dossier at the IAEA. However, our efforts failed because the United States objected to Iran's legitimate rights to enrichment for peaceful purposes.

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[5] http://www.armscontrol.org/factsheets/nptfact.
[6] Greg Bruno, *Iran's Nuclear Program*, Council on Foreign Relations, (September 2008) (updated March 2010).,http://www.cfr.org/iran/irans-nuclear-program/p16811.

Several years later, in February 2010, to assure the international community about Iran's peaceful intentions, Ali Akbar Salehi, then head of the Atomic Energy Organization of Iran, proposed that Iran would keep its enrichment activities below 5 % in return for the West providing fuel rods for the Tehran reactor. The US and the West again declined the offer, which made it necessary for Iran to increase the enrichment level to 20% to build fuel rods for TRR.

In summer 2011, Iran responded positively to Russia's Step-by-Step Plan, which addressed all the West's concerns about Iran's nuclear activities. The Russian proposal required Iran to: 1) Allow full supervision by the IAEA; 2) Implement the IAEA Additional Protocol and subsidiary arrangement Code 3.1; 3) Limit enrichment to 5 per cent; 4) Halt installation of new centrifuges; 5) Limit the number of enrichment sites to one; 6) Address the IAEA's concerns about a 'possible military dimension' to Iran's nuclear program and other technical ambiguities; and 7) Suspend enrichment temporarily.[7] In response, the P5+1 would recognize Iran's legitimate right to enrichment under the NPT and gradually lift the sanctions. The Russian proposal failed because of Western objections.

Disappointed by the failure of the Russian plan, in September 2011, Tehran again proposed stopping its 20 per cent-enrichment activities and accepting fuel rods supplied by the West for the Tehran reactor. Once again, Western objections forced Iran to move toward producing its own fuel rods. Even today, the main reason nuclear talks cannot succeed is because the West is not ready to recognize the legitimate right of Iran to enrichment under Article IV of NPT despite Iran's willingness to commit to maximum transparency and confidence-building measures under the NPT to deal with concerns over the potential diversion of the Iranian nuclear program to use for military purposes.

The case of Iran therefore proves that the third objective of NPT, peaceful nuclear technology for all member states, is not universally realized.

The Way Forward to Secure Peaceful Use of Nuclear Energy and NPT's Objectives

The first and foremost step must be that nuclear arms regulation must become comprehensive, universal and mandatory. The Nuclear Weapon States should demonstrate their serious determination to reduce their reliance on nuclear weapons and orchestrate a 'multilateral and collective security cooperation' effort to address global security threats with measures beyond nuclear arms reductions. The following principles would be essential to guarantee 'nuclear technology for all and nuclear weapons for none'.

1. *To ensure the disarmament objective of the NPT,* all nuclear weapon states should commit to eliminating their nuclear weapons. All countries should join NPT and there should be no discrimination and discrepancies in implementing the treaty. The agenda of nuclear arms reduction should include all categories of weapons in all nuclear weapons countries. To address the multitude of serious nuclear dangers, a broad multilateral approach is essential. Bilateral negotiations to reduce the US and

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[7] http://www.armscontrol.org/2012_07-08/The_Iranian_Nuclear_Dispute_Origins_and_Current_Options.

Russian stockpiles to zero are extremely important because these two countries possess more than 90% of nuclear warheads.

In parallel, a multilateral process should seek to cap, freeze, reduce and ultimately eliminate all other nuclear weapons. The goal of broadening the scope of nuclear arms reductions to zero should include all countries and all types of weapons in their possession. Spanning almost fifty years, the arms negotiations between the US and Russians need to be extended to all other nuclear states because the major risks of nuclear weapons use, proliferation and arms race instability lie outside the US–Russian arena. Therefore it is essential to bring the rest of the nuclear-armed world to the negotiating table to begin to cap, freeze, and reduce these third-country nuclear arms programs. It seems to me that the US and Russian arsenals would need to be downsized substantially – to fewer than 1,000 warheads on each side in order to draw the other nuclear states into the process.

2. The world powers should *end double standards on non-proliferation*. Having strategic relations with countries which are not members of the NPT and possess hundreds of nuclear weapons while penalizing Iran, which is a member of NPT and which neither has nuclear bombs nor has diverted materials from its nuclear program, is clear evidence of applying a double standard which undermines the credibility and legitimacy of NPT. There is no justification for Western countries to upgrade their own nuclear warheads and weapons, while forcing other members of NPT to suspend their peaceful nuclear programs. Israel is the sole possessor of nuclear arms in the Middle East with over 100 ready-to-launch warheads in its stockpile, but Western countries have kept mum on the Israeli atomic arsenals. The sanctions and pressures against Iran, which is a member of NPT and does not have nuclear weapons, exceed those against North Korea which withdrew from NPT and has tested nuclear bombs. Furthermore, the West has established strategic relations with India and Pakistan while they have both refused to join the NPT and each have about a hundred nuclear weapons.

3. The West should *end efforts to monopolize* the scientific knowledge and the technology of peaceful nuclear energy and to deprive others of it through various means including cyber-attacks, assassination of scientists and use of the IAEA as a political instrument to deprive the member states of their rights to peaceful nuclear technology. 'Multilateral arrangements' for uranium enrichment worldwide may be the only sustainable approach to guarantee 'nuclear fuel for all'.

4. A *WMDFZ in the Middle East* is the only durable long-term solution for the Middle East. Israel has been the only obstacle for decades. The US and the international community must play a critical role to realize the initiative. Despite general international support, serious progress has been stymied because Israel has linked discussions on the establishment of the WMDFZ to peace agreements with all of its

neighbours.[8] No such linkage should exist and the establishment of WMDFZ would contribute to peaceful relations. Recently, Israel expressed its strong opposition to the WMDFZ conference that is supposed to take place in Helsinki at the end of 2012 or early in 2013.[9] All countries in the Middle East should participate actively and ultimately undertake not to possess, acquire, test, manufacture or use any nuclear, chemical and biological weapons or their delivery systems.

5. To realize the WMD-free zone in the Middle East, we need serious measures such as measures to reach an agreement on non-intrusive verification of the zone's nuclear-free status; measures to halt production of fissile material or at least to minimize it, measures towards regionalization of enrichment and reprocessing, measures to establish a regional monitoring and verification program supplementing the Safeguard Agreements with the IAEA and, last but not least, a ban on attacks on nuclear facilities based on the 1990 IAEA General Conference Resolution 533, which prohibits 'all armed attacks against nuclear installations devoted to peaceful purposes whether under construction or in operation'.[10]

6. *The 'inalienable right'* of NPT member nations to the peaceful use of nuclear technology should not be held hostage to their political relations with other members. Resolving the Iranian nuclear dilemma through diplomacy and a face-saving solution is a must. It seems as if the US is intent on using the nuclear issue as an instrument to orchestrate international pressures to bring regime change in Iran. History suggests that the nuclear issue is subsidiary to Iran–US relations and Iran–US relations have been profoundly influenced by the Iran–Israel conflict.

In October 1992, Israel's then Foreign Minister Shimon Peres warned the international community that Iran would be armed with a nuclear bomb by 1999 and reiterated that Iran is the greatest threat and problem in the Middle East because it seeks the nuclear option.[11] In 1995, Benjamin Netanyahu wrote in his book 'Fighting Terrorism: How Democracies Can Defeat Domestic and International Terrorists' book that Iran would possess nuclear weapons in 3 to 5 years.[12] In July 2001, Defence Minister Binyamin Ben-Eliezer asserted that Iran

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[8] http://www.armscontrol.org/factsheets/mewmdfz.

[9] http://www.haaretz.com/news/diplomacy-defense/israel-rejects-u-s-backed-arab-plan-for-conference-on-nuclear-free-mideast.premium-1.465679

[10] International Atomic Energy Agency, General Conference, *Measures to Strengthen International Co-operation in Matters Relating to Nuclear Safety and Radiological Protection*, IAEA GC(XXXIV)/RES/533, (21 September 1990), available at http://www.scribd.com/doc/92463187/IAEA-GC-XXXIV-RES-533-Resolution-re-Armed-attack-on-and-threats-against-nuclear-facilities.

[11] Then-Foreign Minister Shimon Peres in an interview with French TV, as described in the book 'Treacherous Alliance', see Trita Parsi, *Treacherous Alliance. The Secret Dealings of Israel, Iran, and the United States*, New Haven/Conn.: Yale University Press (2007).

[12] Benjamin Netanyahu, *Fighting Terrorism. How Democracies Can Defeat the International Terrorist Network*, New York: Farrar, Straus and Giroux (1997).

would have the nuclear bomb by the year 2005.[13] In February 2009, Netanyahu told an America congressional delegation that Iran is only one or two years away from having nuclear weapons.[14] And, in August 2012, Israel claimed that Iran has made surprising, significant progress toward a military nuclear capability and that the conclusions of US intelligence are quite similar to those of Israel.[15]

However, the US and the majority of its allies generally agree on three things about Iran's nuclear program: 'Tehran does not have a bomb, has not decided to build one and is not on the verge of achieving a nuclear weapon'.[16] Nevertheless, they believe that Iran intends to at least acquire the capacity to build nuclear weapons in a relatively short time should it deem them necessary and, as a result, they do not trust Iran to confine its nuclear activities to non-military purposes.[17]

Israel's strategy is to use the Iranian nuclear issue to drag the US into a devastating war with Iran if possible, to influence US elections in favour of Mitt Romney, the Republican nominee and, if that fails, to commit President Obama to adopt publically a more aggressive military stance toward Tehran, to enshrine Iran as the No. 1 threat to peace and security in the Middle East, to push the US and EU to implement further sanctions and to distract the world from focusing on the Israel–Palestine peace process.

To find a reasonable compromise is possible. The principles agreed in Istanbul in early 2012 remain the basis for a solution. These are: using the NPT as a framework, mutual confidence-building, reciprocity and working on a step-by-step plan.

In a step-by-step plan, the P5+1 would recognize the legitimate rights of Iran to enrichment and lift their sanctions gradually. In return Iran would: implement Additional Protocol and Subsidiary Arrangements Cod 3.1, would cooperate fully with IAEA addressing remaining technical ambiguities including Possible Military Dimensions (PMD) issues which requires access beyond the Additional Protocol and Subsidiary Arrangement, and would operationalize the Leader's Fatwa against nuclear weapons. These measures would cover the UNSC and IAEA requirements for transparency.

Moreover, to address international concerns over possible break-out: a joint committee between P5+1 and Iran would determine the size of an Iranian stockpile of enriched uranium required for domestic consumption and the remaining stockpile would either be exported or converted to fuel rods, Iran would give full transparency on production of centrifuges, Iran would accept capping its enrichment at 5% and, ultimately, Iran and the international community would work for a regional or multinational enrichment consortium.

7. *Creating a model for others:* with 14 countries operating or building enrichment plants, a successful resolution of the Iranian nuclear case could provide a model for dealing with other countries with break-out capability and contribute positively to non-proliferation.

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[13] Associated Press, "Israeli defense minister: Iran could have nuclear weapons by 2005"

[14] http://www.salon.com/news/iran/index.html?story=/politics/war_room/2010/12/05/israeli_predictions_iranian_nukes.

[15]   http://www.haaretz.com/news/diplomacy-defense/obama-gets-new-u-s-nie-iran-making-surprising-progress-toward-nuclear-capability.premium-1.456921

[16] http://www.huffingtonpost.com/2012/08/09/iran-nuclear-program-us_n_1762134.html?utm_hp_ref=world

[17] Ibid.

Promoting Nuclear Safety and Nuclear Security in the Middle East Region

MARK FITZPATRICK[*]

As states in the region work towards establishment of a Zone in the Middle East free of nuclear weapons and other weapons of mass destruction, they may in the meantime wish to consider cooperative measures in the field of nuclear safety and security that would be valuable in their own right and could help to establish the greater sense of trust that will be necessary for materialization of a "Zone". With nuclear power having newly arrived in the region and with more reactors on the way, issues of nuclear safety and nuclear security take on vital importance. It will be critical for Middle East states that are pursuing nuclear power to implement effective national policies, to sign up to international instruments and to adhere to global regimes. Mutual encouragement to adopt such national policies and practices is one way that states of the region can join in common purpose. Another way, and at a higher level of political difficulty, Middle East states may find utility in coordination and cooperation on a regional basis. At the highest level of aspiration, states might seek to build a structure for regional collaboration on nuclear and radiological safety and security.

Introduction of nuclear power

In the past several years, nearly every state in the Middle East has given consideration to introducing nuclear power as a means of strengthening energy security, diversifying energy sources, saving fossil fuels, mitigating climate change and even enhancing national prestige. The so-called "nuclear renaissance" was over-hyped from the beginning, and the Fukushima nuclear set back nuclear energy plans in many areas of the world, including the Middle East. Nevertheless, the region remains a growth area for nuclear power. This year Iran became the first nation in the Middle East to produce nuclear energy, with the start-up of the long-delayed Bushehr reactor.[1] In the United Arab Emirates, construction began this July on the first of four reactors, scheduled to come into operation by 2020. Saudi Arabia in June 2011 announced an ambitious plan to spend $300 billion on 16 nuclear reactors by 2030, with the first to come into operation by 2021. In Egypt, weeks after taking office, newly elected

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[1]Although Bushehr is the only operational nuclear power plant in the Middle East, six countries operate research reactors to produce isotopes for medical and industrial use and for research and training purposes. Most of these facilities are small. Egypt has two research reactors at Inshas, one with a thermal output of 10MW that has been operating since 1961 and is at the end of its lifetime, and a newer, larger reactor with a 22MWt capacity. Algeria has a 1MWt pool-type research reactor at the Draria nuclear complex that went critical in 1989 and a 15MWt heavy-water-moderated reactor at Ain Oussera, which went critical in 1992. Libya's 10MWt research reactor at Tajoura went online in 1981 and in 2006 was converted to run on low enriched uranium. Morocco has a 2MWt TRIGA Mark II-type light-water reactor which went critical in 2006 and was declared operational in May 2007. Iran has four small research reactors at Esfahan and is constructing a 40MWt heavy-water research reactor at Arak. Israel operates a 5MWt civilian research reactor at Soreq and an unsafeguarded 70Wt reactor at Dimona that produces plutonium for weapons purposes.

President Mohamed Morsi said that Cairo was again considering a civilian nuclear power program, which was put on hold the previous year amidst political turmoil. Meanwhile, Jordan has ambitious plans to introduce nuclear power for electricity generation and water desalination, for which it has undertaken feasibility studies and sought foreign cooperation. Adjacent to the narrowly defined Middle East region,[2] Turkey recently announced that construction of the first power unit of Akkuyu Nuclear Power Plant in Mersin city will be completed in 2019.[3]

With so many nations in the region newly introducing nuclear power in the next two decades, there will be growing concern about the safety and environmental risks. Given the pattern of wind and ocean currents, the direct impact of a nuclear accident in any of the countries of the region would be transnational. All the nuclear power plants under consideration are to be sited on water bodies shared with others: the Persian Gulf, the Mediterranean and the Red Sea.

Particular attention has been paid to the potential for transnational nuclear safety dangers associated with Iran's reactor at Bushehr. This is perhaps inevitable, given that it is the first nuclear power plant to be built in the region. Concerns are also heightened because the Iranian plateau is known to be seismically active and because Iran, being under international sanctions, has not been able to benefit from extensive international cooperation that might directly or indirectly enhance nuclear safety. Officials and non-governmental experts from the countries of the Gulf Cooperative Council (GCC) have often expressed concern about the spread of radiation in the event of a nuclear accident at Bushehr, which is closer to each of the six GCC capitals than it is to Tehran. Radioactive contamination of the Persian Gulf, the only source of water for four of these countries would leave them without drinking water. Being downwind of the reactor, all of the GCC countries would also be adversely affected by air contamination from a Bushehr accident.[4] The timing of the nuclear disaster at Fukushima, months before start-up of Bushehr, exacerbated concerns.[5] If even such an economically advanced nation as Japan, with all of its technological prowess and acclaimed safety culture, could fail to prevent and wisely manage a nuclear accident, it is natural to wonder whether the Gulf region could be protected against a disaster at Bushehr.

Strengthening nuclear safety

Every country that introduces nuclear power will need to give priority attention to the regulatory framework; management of nuclear plant safety; the safe transport, treatment and disposal of radioactive waste; emergency preparedness to enhance accident prevention as well as remediation in the event of an accident).

To reassure neighbours, but more importantly for the safety of their own citizens, all states in the region that are building or planning nuclear power plants should sign and ratify the IAEA **Convention on Nuclear Safety**, which encourages parties to maintain a high level of

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[2] The geographic boundaries of the Middle East to be included in the Zone have not been set in concrete, but are understood to include the Arab states, Iran and Israel.

[3] 'Construction of first power unit of Akkuyu nuclear power plant to end in 2019', Anadolu Agency, (20 October 2012), http://www.aa.com.tr/en/news/92528--construction-of-first-power-unit-of-akkuyu-nuclear-power-plant-to-end-in-2019

[4] Tariq Khaitous, Why Arab leaders worry about Iran's nuclear program, in: Bulletin of the Atomic Scientists, (23 May 2008), http://www.thebulletin.org/web-edition/features/why-arab-leaders-worry-about-irans-nuclear-program.

[5] See, for example, Dossier: Sami Al Faraj, Strategist issues Iran nuke warning citing tectonic plates, Fukushima, Geo-Strategy Direct, (2 November 2011), p. 5.

safety by meeting international benchmarks.[6] In the Middle East, the convention is in force in Bahrain, Jordan, Kuwait, Lebanon, Libya, Saudi Arabia, Tunisia, and the United Arab Emirates (UAE), most of which ratified or acceded to the Convention within the past three years. Kuwait acceded to the convention in 2006 and Lebanon, ratified it in 1996. Algeria, Egypt, Israel, Morocco, and Syria all signed the convention in 1994, the year it came into effect, they have yet to ratify it. The regional non-signatories are Iran, Iraq, Oman, Qatar, and Yemen. Iran is the only nation in the world that operates a nuclear power plant not to accede to the convention. In addition to remedying that anomaly and the concern to which it gives rise, Iran would also be encouraged to accept a long-standing offer by the International Atomic Energy Agency (IAEA) to send a pre-Operational Safety and Review Team (OSART) mission to evaluate the Bushehr plant.[7]

- The **Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management** is another international convention that all states in the region that operate nuclear facilities should be encouraged to sign and ratify.   This instrument calls for review meetings of contracting parties, which are required to submit national reports addressing measures taken to implement the convention obligations. In the Middle East, the only two states parties are Morocco and the UAE. Lebanon signed the joint convention in 1997 but has yet to ratify it.

Two other important nuclear safety conventions have been accepted by most, but not all states of the region:

- The **Convention on Early Notification of a Nuclear Accident**, which was adopted in 1986 following the Chernobyl nuclear plant accident and which establishes a notification system for nuclear accidents that could spread radiation to other countries. The convention is in force in all Middle East states with the exception of Syria (which has signed but not yet ratified the convention) and Yemen.
- The **Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency**, which was also adopted after the Chernobyl accident, and which sets out a framework for international cooperation in the event of accidents. Bahrain, Syria and Yemen are the only countries in the region for which the convention is not in force.

Strengthening nuclear and radiological security

There are two categories of security risks associated with nuclear technology: 1) the release radiation as the result of a terrorist attack on or sabotage of a facility or nuclear materials that are in transit, and 2) the production of an improvised nuclear device (IND) or of a

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[6] Here and elsewhere, the author has drawn on David Santoro, Status of non-proliferation treaties, agreements, and other related instruments in the Middle East, Background paper EU Seminar to promote confidence building and in support of a process aimed at establishing a zone free of WMD and means of delivery in the Middle East, Brussels, (6-7 July 2011), http://www.nonproliferation.eu/documents/backgroundpapers/santoro.pdf.

[7] Nima Gerami, Nuclear safety in Iran, post-Fukushima, in: Bulletin of the Atomic Scientists, (3 August 2011) http://www.thebulletin.org/web-edition/op-eds/nuclear-safety-iran-post-fukushima.

radiological dispersal device (RDD) stemming from the theft of nuclear or radioactive materials by non-state actors. Preventing acquisition and use of a nuclear bomb by terrorist groups is accorded top priority by many policy makers because of the extremely adverse consequences albeit the low probability of such an event. Terrorist explosion of a radiological dirty bomb is a more likely scenario, but much less lethal, although the radioactive contamination in a populated area could have serious economic and social consequences for a local economy. To date there has been no incidents of nuclear or radiological terrorism although intelligence agencies in the mainland Europe, the UK, the US and Thailand have foiled RDD plots before they have reached fruition,[8] and in 1995 Chechen terrorists placed a small quantity of cesium-137 in one of Moscow's parks. Because the radiological material was not dispersed, it was considered to have been used as a psychological weapon to create panic.[9]

Given that all states have a national interest in preventing nuclear terrorism, states in the region might find it beneficial to discuss common strategies and efforts to protect fissile and radiological material. States in the region should be encouraged to adopt three key nuclear security instruments:

- The **Convention on the Physical Protection of Nuclear Material** (CPPNM), which was adopted in 1979 and has been in force since 1987, establishes measures to prevent, detect, and punish offenses related to nuclear material. States parties are obliged to make specific arrangements and meet defined standards of physical protection for international shipments of nuclear material; undertake not to export or import nuclear materials unless they have received assurances that these materials will be protected during international transport; cooperate in the recovery and protection of stolen nuclear material; and criminalize specified acts. In the Middle East, the Convention has been acceded to or ratified by all states except Egypt, Iran, Iraq, and Syria.

- An **Amendment to the CPPNM**, adopted by states parties in July 2005, extends its measures to domestic use, storage, and transport of nuclear materials. It also provides for expanded international cooperation to locate and recover stolen or smuggled nuclear material, to mitigate any radiological consequences of sabotage, and to prevent and combat related offenses. To enter into force, the Amendment must be ratified by two-thirds of the CPPNM states parties. Of the CPPNM Middle East states parties, Algeria, Bahrain, Israel Jordan, Libya, Saudi Arabia, Tunisia, and the UAE have deposited documents of ratification or acceptance. CPPNM states parties that have yet to deposit such instruments include Comoros, Djibouti, Kuwait, Lebanon, Morocco, Oman and Qatar.[10]

[8] Scott Sagan, presentation to the AAAS conference titled: Emerging Nuclear Power in Regional Contexts: Southeast Asia, Singapore: Mandarin Oriental, (3 November 2010).

[9] Jerzy Zaleski, New Types and Systems of WMD: Consideration by the CD, UNIDIR Background paper by, (May 2011), paragraph 28, http://unidir.org/pdf/ouvrages/pdf-1-92-9045-011-F-en.pdf.

[10] It might be noted that the United States also has yet to ratify the Amendment. Each national ratification is of equal value, of course, in the count to the two-thirds of CPPNM states parties that are required to bring the amendment into force.

- The **International Convention for the Suppression of Acts of Nuclear Terrorism**, also known as the Nuclear Terrorism Convention, was adopted in 2005 under the auspices of the United Nations. It calls on states parties to criminalize acts of nuclear terrorism, to promote law enforcement and judicial cooperation to prevent, investigate, and punish those acts, and to physically protect nuclear and radiological materials as recommended by the IAEA. As of October 2012,the Convention had yet to be signed by Iran, Iraq, Oman, and Yemen or ratified by Egypt, Israel, Jordan, Kuwait, Qatar, and Syria.

The **Code of Conduct on Safety and Security of Radioactive Sources** is another instrument that has been promoted by the IAEA to encourage states to attend to the proper security of nuclear and radioactive materials. As a set of practical guidelines on how to comply with the Code, the IAEA Board of Governors in September 2004 approved a document entitled Supplementary Guidance on the Import and Export of Radioactive Sources. The Code is not legally binding, but states are encouraged to make a political commitment with regard to the Code and the Supplementary Guidance. Egypt, Iraq, Qatar and Yemen have made political commitments with regard to both instruments. As of 20 September, Israel, Jordan, Morocco, Oman, Syria and Tunisia have notified the IAEA of their commitment to the Code of Conduct but not yet to the Supplementary Guidance.

Seven Middle Eastern states have also found it useful to join the Global Initiative to Combat Nuclear Terrorism (GICNT), which was launched in 2006 by the US and Russia in order to improve capacity to prevent, detect, and respond to a nuclear terrorist event. Partner nations organize and host workshops, conferences, and exercises to share best practices to implement the GICNT Statement of Principles.[11] The partners in the Middle East are Bahrain, Israel, Jordan, Libya, Morocco, Saudi Arabia, and the UAE.

Transparency in national nuclear programs and adherence to international standards is a sine qua non for addressing concerns about neighbouring states about what the introduction of nuclear power could mean for the safety of their citizens, the protection of their environment and the stability of their economies. Beyond national policies, states in the Middle East might also find benefit in cooperating with one another on nuclear safety and security. This is easier said than done. A case in point is the situation in Southeast Asia, where the states of the region have formed a successful regional organization (ASEAN) and declared a nuclear-weapon-free zone (the Bangkok Treaty). There are no inter-state disputes that the states of the region are not able to manage peacefully. Yet even though the ASEAN members have developed institutions relevant to nuclear safety and security issues, they seem reluctant to make use of these institutions. Despite the rhetoric of consensus, they have not agreed to supplement international cooperation through the IAEA with cooperation at the regional level.[12]

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[11] The GICNT Statement of Principles is available at http://www.state.gov/documents/organization/141995.pdf.
[12] International Institute for Strategic Studies, Preventing Nuclear Dangers in Southeast Asia and Australasia, London: IISS, (2009), p. 12.

Cooperation in nuclear applications and nuclear power

Moving beyond encouragement to accept international instruments relating to nuclear safety and security, states in the region might advance trust in the nuclear field by sharing nuclear technology for various peaceful uses. One such project has already been adopted under the auspices of the IAEA and the UN Educational, Scientific and Cultural Organization (UNESCO): the Synchrotron-Light for Experimental Science and Applications for the Middle East (SESAME) initiative, hosted by Jordan and involving Israel, the Palestinian National Authority, Bahrain, Egypt and Turkey. The aim of the project has been to bolster regional cooperation in nuclear applications. Begun in 2003, and slated to be completed in 2015, SESAME will culminate in the construction of a very large particle accelerator that generates x-ray and ultraviolet light beams, intended for use in research in medicine, physics and other fields.

In several regions of the world the IAEA has established regional technical assistance programs to promote cooperative research, training, development and applications in nuclear science and technology.   One of these is in the Middle East, where the Cooperative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology (ARASIA) entered into force in July 2002.[13] As the name implies, it is limited to Arab states. The political benefits of this effort would be increased and extended to the political realm if the cooperative research through the IAEA were extended to other regional parties.

Another example of regional cooperation in nuclear applications is a workshop that Israel intends to host in the framework of the IAEA Technical Cooperation program on "Quality Assurance in Radiotherapy for Asia and Pacific Region. Israel recently announced that it would welcome all states in the region to attend the workshop, and to apply for scientific visits and fellowships in this domain.[14]

It should be noted that Iran on several occasions has offered to share its civilian nuclear technology with Muslim neighbours, particularly Egypt.[15]

Much ambitiously, joint ventures to build nuclear power plants and to share the electrical output through interconnected grids could make economic sense for several of the smaller states in the Middle East, including Jordan and Israel. In an ideal world, shared nuclear power initiatives could provide huge benefits in terms of confidence building and a sense of shared purpose. However, such cooperation has not proven possible to date even among GCC states, notwithstanding their announcement in December 2006 of a study for a joint programme in the field of nuclear technology.

Ban on radiological weapons

One measure that would present both greater political difficulty and greater political and practical benefit would be to adopt a regional ban on radiological weapons. Proposals for banning such weapons globally have been on the international agenda since 1978 when the General Assembly's Special Session on Disarmament called for the conclusion of a

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[13] Information about ARASIA can be found on the IAEA website at http://web.aec.org.sy/arasia/.

[14] Statement by Dr Shaul Chorev, Head of Israel Atomic Energy Commission to the 56th General Conference of the IAEA, 19 September 2012, http://www.iaea.org/About/Policy/GC/GC56/Statements/israel.pdf.

[15] See, for example, MP Hopes for Start of Iran-Egypt N. Cooperation after Mursi's Visit to Bushehr Plant, Fars News Agency, (28 August 2012), http://english.farsnews.com/newstext.php?nn=9106040220.

convention "prohibiting the development, production, stockpiling, and use of radiological weapons." The next year the USSR and the US make a joint proposal on major elements of a treaty banning radiological weapons. In the 1980s, contact groups to flesh out the idea floundered in the Conference on Disarmament. Germany revived the proposal in 2002, and the issue remains on the CD agenda though there is little serious interest in negotiating a treaty on the subject. Contentious issues include the scope of the ban, the definition of radiological weapons, and the relationship of the proposed treaty to other nuclear disarmament measures. Verification issues are also problematic, in that tens of thousands of radioactive sources presumably would have to be tracked and inspected.[16] A regional ban might seek to avoid some of these problems by stating a norm against radiological weapons without verification measures, such as is the case with the biological weapons convention.

Whether such a norm would influence the terrorist groups that presumably would be the most likely actors to produce and use radiological bombs is a relevant question. However, developing such a norm would be a good place to start. Since no nation in the region is suspected of possessing radiological weapons or of having any interest in them, a ban should not impose insurmountable difficulties. The key would be not to encumber it with unpalatable conditions or to link with other initiatives that are more intractable.

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[16] Jerzy Zaleski, New Types and Systems of WMD: Consideration by the CD, UNIDIR Background paper, (May 2011), paragraphs 26, 27, http://unidir.org/pdf/ouvrages/pdf-1-92-9045-011-F-en.pdf.

A Regional Arrangement on Securing Radiological Agents as a CSBM: Common Interest in Preventing Radiological Terrorism

AVIV MELAMUD AND NILSU GÖREN*

Confidence and Security Building Measures (CSBMs) are intended to build trust and enhance security between parties to a political process, and can contribute to gradual conflict transformation and resolution. In this paper, we propose that designing and implementing a radiological materials-secured zone for the protection of radiological materials and the prevention of radiological terrorism on the regional level could serve as a CSBM by positively contributing to a Middle East regional arms control and security process. Since the need for protection against radiological terrorism is shared by all regional actors, and considering that radiological weapons are not likely to be included in any actor's national security strategy, the issue of radiological protection can offer a cooperative project which would not only enhance security through the prevention of radiological threats, but could also build further channels of collaboration in the region and thus increase confidence.

The Threat of Radiological Weapons

Radiological weapons are the fourth and sometimes overlooked type of weapons of mass destruction (WMD),[1] often forgotten behind the nuclear, chemical and biological threats. A typical radiological weapon – called Radiological Dispersal Device (RDD), or 'dirty bomb' – would trigger the scattering of radioactive material by a conventional explosion (to be distinguished from a *nuclear* explosion as occurs in nuclear weapons) or by other means, for the purpose of area denial through radiological contamination, as well as possible physical effects of this contamination on people exposed (lethal or non-lethal, depending on the dose).[2] Based on the size of the radiological weapon, the radiological fallout has the potential to make an area uninhabitable for an extended period of time. Radiological weapons are not

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[1] The UN Commission on Conventional Armaments (CCA) WMD definition from 12 August 1948: '… weapons of mass destruction should be defined to include atomic explosive weapons, radioactive material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned above'. W. Seth Carus, Defining Weapons of Mass Destruction, Center for the Study of Weapons of Mass Destruction, Occasional Paper, No. 8, (January 2012), pp. 9-10, available at http://wmdcenter.dodlive.mil/files/2006/01/OP8.pdf.

[2] For an overview of likely radioactive materials to be used in an RDD, health risks, decontamination and treatment, see Radiological Terrorism Fact Sheet, Centers for the Study of Bioterrorism and Emerging Infections (September 2002), available at http://www.bioterrorism.slu.edu/dirty/dirty.pdf.

likely to be a weaponization option for states, yet because radiological materials for peaceful purposes might not be equally safe and secure in every country, where they are used in medicine, commerce, industry and research facilities, a radiological weapon may be the WMD chosen for acts of terrorism.

Different arrangements regarding the protection of nuclear and radiological materials were developed already several decades ago, but since 9/11, concerns over nuclear and radiological terrorism have heightened and international arrangements on related issues have been correspondingly revised or newly formulated. However, despite the existence of quite a few mechanisms for enhancing the physical protection of such materials (see annex for an overview), a sufficiently comprehensive international regime that addresses radioactive threats has not yet materialized.[3] Without a regime on the safety and security of radioactive sources, which would incorporate the different existing mechanisms into a complete treatment of related issues, terrorists can make use of the loopholes and gain access to radioactive materials which are not accounted for. In the Middle East, the creation of such a regime could comprehensively protect against the threat of radiological terrorism, and also serve as a CSBM for the region by offering a feasible process on an approachable topic, en route to discussions of more complex WMD issues.

Radiological Weapons – Terrorists' Likeliest WMD of Choice

While it is generally agreed that an RDD is unlikely to cause many casualties or even cause substantial contamination,[4] its economic and psychological effects would nevertheless be extensive. Assumptions about the massive response to radiological weapon use, estimation of the ability to get to target, and assessment of the potential for casualties from being exposed to non-lethal doses of radiological materials could lead terrorists to choose this path. A terrorist explosion of an RDD would be more of a weapon of mass *disruption* than a weapon of mass *destruction*, yet its use would certainly constitute a new kind of terrorist attack.

Small groups can tactically use chemical, biological, radiological, and nuclear (CBRN) terrorism in order to attract the attention of the public, international media, and governments. A radiological terrorist attack would aim at impairing the normal conduct of social life (targeting, for instance, government offices or community facilities). Such an attack is perceived to be more easily implemented than a nuclear one: the likelihood of nuclear terrorism is quite improbable, considering that manufacturing an improvised nuclear device (IND) requires nuclear engineering know-how, extensive and well-equipped facilities, as well as obtaining fissile material, for which security and accounting systems are relatively extensive.[5] These requirements might force terrorists to abandon nuclear scenarios in favour

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[3] See also Benjamin Hautecouverture, A Possible International Regime to Cover Radiological Materials, CESIM Research Paper, ICNND (October 2009), p. 19, available at: http://www.nonproliferation.eu/documents/other/benjaminhautecouverture4ecd0d76b3036.pdf; Hautecouverture concludes that a more integrated international regime to cover radiological materials is required.

[4] See, e.g., analyses by Christoph Wirz and Emmanuel Egger, Use of Nuclear and Radiological Weapons by Terrorists?, in: International Review of the Red Cross, vol. 87 no. 859 (September 2005), pp. 505-507, available at http://www.icrc.org/eng/assets/files/other/irrc_859_egger_wirz.pdf; Anthony H. Cordesman, Radiological Weapons as Means of Attack (8 November 2011), available at http://csis.org/publication/radiological-weapons-means-attack; Klaas van der Meer, The Radiological Threat: Verification at the Source, in: Verification Yearbook (2003), pp. 129-130, available at http://www.vertic.org/media/Archived_Publications/Yearbooks/2003/VY03_VanDerMeer.pdf; Peter D. Zimmerman with Cheryl Loeb, Dirty Bombs: the Threat Revisited, in Defense Horizons, no. 38 (January 2004), available at http://hps.org/documents/RDD_report.pdf.

[5] See Wirz and Egger, ibid, pp. 499-502.

of a radiological attack. Depending on the feasibility to the group given their financial and human resources, they could also choose to deploy a different kind of radiological dispersal device (not necessarily one that uses explosives) to conduct a radiological attack if they believed they had the capability to effectively disperse the agents.

The actual casualties from a radiological attack would be minimal when compared to an IND, but the aim would be to generate widespread fear in the local population, to create chaos and more importantly spawn mistrust in the government's ability to protect its citizens. A further substantial consequence of an RDD attack would be its economic toll, due to such factors as temporary or long-term loss of real estate value and disruption in economic activity depending on the relative capability of the state to clean up, on top of the direct extensive costs of decontamination.[6] The unique character of being able to ensure a continued impact in the aftermath of the attack (through contamination) is dramatic and could be enticing to terrorist groups.

There are various radioactive sources available for weaponization: radioactive materials can either be stolen or obtained through illegal contacts from facilities using such materials for commercial and medical purposes, where they are widely used. Potential radiological warfare agents that a group could have access to and choose to deploy can be categorized based on the degree of radiation and resulting damage. For instance, uranium ore is an alpha emitter that needs to be inhaled or consumed in large quantities to be destructive, hence not feasible for a small terrorist group. Americium-241 is used in small quantities in smoke detectors, medical equipment, and other industrial products, and would require a terrorist group to purchase large numbers of smoke detectors, which would be suspicious and infeasible; however, a front group for the production of items that require radioactive materials, e.g. smoke detectors, could be set up, subsequently diverting them. Despite their costs, caesium-137 and cobalt-60 are relatively easy to obtain and remove from medical facilities because they are commonly used in cancer treatment by radiation therapy.[7] Another option for the acquisition of materials by a non-state actor for the preparation of an RDD is theft of highly radioactive material from nuclear facilities during its transportation (e.g. from fuel cooling ponds to temporary or permanent storage locations). Given the rising interest in nuclear energy in the Middle East due to rising energy demands, water scarcity, and – in some countries – lack of natural resources, the amount of radiological material suitable for an RDD could increase dramatically over the next years.

The successful deployment of radiological weapons by violent non-state actors requires greater technical competence in the field than just acquisition of radioactive materials. Unless it is a suicide attack, it would require the protection of the terrorist against radiation by shielding during the handling of the materials and device in the operation. Given the nature of attacks in the Middle East, radioisotopes that are potentially available to terrorists could most easily be utilized in car bombs to disperse the radiological materials in urban areas. In such cases, the explosive itself would serve as the delivery system to make the design of the attack less complicated. Even though terrorists would not likely be able to disrupt major economic sites in the context of the Middle East (such as energy facilities, usually located in the hinterland) by this kind of attack, they could still utilize public fear to generate mistrust in the government. The relatively easy acquisition of primary radiological agents of harm by

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[6] See e.g. analyses referred to in footnote no. 4 above.
[7] A more extensive review can be found in Charles D. Ferguson, Tahseen Kazi and Judith Perera, Commercial Radioactive Sources: Surveying the Security Risks, CNS Occasional Paper no. 11 (2003), available at http://cns.miis.edu/opapers/op11/op11.pdf.

terrorists and the lack of a legal, organized framework on the international level to counter radiological weapons support the need for an appropriate regional response to securing these materials in order to prevent radiological terrorism. The appropriateness of this topic is further enhanced due to the lack of interest by states in the region to develop this class of weapons for their own use, which supports the potential feasibility of a dialogue on this issue.

Gradually Promoting Confidence – Starting with the Achievable

Due to the high levels of hostility and lack of trust between regional actors, arms control and regional security issues in the Middle East are extremely sensitive. The protracted conflicts and widespread tensions along several cleavages are not conducive to promoting regional security, and particularly in the context of WMD, the priorities of regional actors are not compatible and they therefore envision different – and contradicting – CSBMs as necessary preliminary steps.

The prominent negotiating technique according to which less complicated issues are handled first is intended to create momentum in a negotiation process, which would lead to and support the later negotiations on so-called 'hard nuts' – the sensitive aspects, most related to national interest and security, and therefore highly problematic for reaching compromise and agreement. Starting with the achievable can create momentum in the negotiation dynamics, leading to consideration of complex aspects in the spirit of initial accomplishment. While the focus on more procedural and less central aspects can be easily dismissed as marginal, and criticized for creating a false momentum, as well as artificial trust, which will easily collapse when the difficult – and more substantial – topics are reached, it is still a valuable endeavour which would produce substantial gains, especially in times of stalemate.

While the 'traditional' WMDs are too sensitive to be directly handled and, when discussed, tend to drive the parties deeper into their positions, a regional process on the radiological threat could create progress on a class of weapons that practically does not exist in the region for lack of military utility, but the threat of which is shared by all states. With agreement on how to counter the radiological threat and the establishment of a regional code of conduct on securing radiological materials, some valuable momentum could be created, and should not be taken lightly in a region where agreement is not easily reached. Such a process will also create and sustain a routine and infrastructure for cooperation in the region which could be leveraged to address more intractable issues at a later time. Lastly, a continued and sustained dialogue on practical issues of regional security and arms control can be considered in and of itself a meaningful goal in the Middle East.

A Radiological Materials-Secured Zone for the Region: A Possible Way Forward?

With respect to the Middle East zone free of weapons of mass destruction conference, endorsed by the 189 member states during the 2010 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) to take place by December 2012 in Finland, a regional process aimed at securing radiological materials in the Middle East could serve as a meaningful CSBM. The Middle East, a conflict-prone region in need of arms control initiatives to promote regional security, could re-start the regional arms control process with a radiological materials-secured zone.

Addressing matters of security and cooperation on radiological materials at a regional level, rather than globally, offers the possibility of creating a regime which is more comprehensive as well as more profound and which deals with specific concerns and realities in the region with greater efficacy.[8] Because many sporadic arrangements already exist on the international level (as overviewed in the annex), the fundamental definitions and standards of such a zone should be based on the International Atomic Energy Agency's (IAEA) internationally agreed standards for safety and protection of radiological materials.[9]

For the implementation of such a regime, operational challenges require an adaptive architecture and robust infrastructure to detect radiological sources, especially when they are heavily shielded. Fortunately, there is a natural characteristic of radioactive materials that makes them suitable for detection and regulation: they are quite difficult to conceal. All radioactive sources emit energy and the spectrum and intensity of the emission is unique to each element. Although heavy shielding can exponentially reduce the amount of observed radiation, no shielding can bring the emissions to zero. In order to improve threat identification, advanced neutron and gamma detectors and intercommunicating radiation detection systems are needed. Work on developing a regional radiological materials secured zone – or a code of conduct to that effect – can begin immediately, based on existing and available technologies for protection and detection of radiological materials and the standards and procedures developed by the IAEA.

A regional dialogue on the establishment of a radiological materials-secured zone would be an on-going process aimed at addressing the varied aspects handled on the global level– some of which are not comprehensive, others not legally-binding – and incorporating them together in an agreed framework such as a code of conduct. The different aspects are already addressed sporadically, mostly through IAEA standards and recommendations and its regime on the international shipment of radiological materials as well as physical protection conventions; and thorough implementation of these measures would enable identification and securing of radiological materials. But a regional arrangement could integrate these elements into a comprehensive system and also incorporate unique mechanisms for regional cooperation, such as the promotion of a regional strategy for the response to RDDs and mitigation of their consequences, and initiation of joint research and development projects on peaceful uses of radioactive materials. This could include, *inter alia*, the following considerations:

- Setting up national registers of radioactive materials and standards for export license systems, as well as national authorities for regulation of licenses, and identifying required updates for national legislation and standards for legislation at the state level
- Establishing standards for securing radioactive resources and for upgrading physical protection
- Developing measures to detect and secure radioactive materials that are outside of regulatory control to counter smuggling

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[8] While a global regime must fit many different actors with different considerations and perceptions, and is therefore often diluted to suit all, a regional arrangement can be tailored to the specific realities and requirements of a particular region. The idea of creating nuclear weapons free zones is based on this assumption – that a regional arrangement can be more comprehensive and will offer regional actors a greater sense of security, by addressing their specific concerns.

[9] See, e.g., IAEA's extensive work on radiation protection safety standards: http://www-ns.iaea.org/standards/documents/topics.asp?sub=160.

- Formulating programmes for capacity-building through public education and awareness raising, as well as formulating response strategies
- Designing mechanisms for regional information exchanges and sharing, e.g. on techniques used for protection of radiological materials and recovery of orphan sources.
- Formulating inspection procedures for border crossings and standardized equipment usage

Such a process can be augmented or initiated with a regional statement (in the form of a joint statement or a self-declared moratorium) or even a formal ban (in the form of an agreement) prohibiting the production, acquisition, development and stockpiling of radiological weapons at the state level. Such a statement or agreement can be based on the planned Treaty Prohibiting Radiological Weapons, which was negotiated in the Conference on Disarmament in the 1980s (for more on the CD's work on radiological weapons, see the annex below). This could in and of itself serve as a CSBM by completely removing a class of weapons from the region and as a declaration it would not require an extensive investment of time and resources. It would, however, constitute a genuine achievement – a first step towards an eventual WMD-free zone, banning also the remaining three classes of WMD, namely chemical, biological and nuclear.

The focus on the radiological threat as the subject matter of a regional CSBM would be most feasible at this time, much more so than the other WMD types, which are the obvious 'hard nuts'. The radiological threat could be addressed at a regional level as an exercise in confidence building, which would secure against a possible threat while avoiding the more problematic classes of weapons. If a regional arrangement on radiological materials could be reached, the effect would be twofold – it would strengthen the security of radiological sources and protect against radiological terrorism, and perhaps more importantly, it would have achieved some regional agreement and could further pave the way towards agreement on the 'tougher' issues.

Annex

Overview: Existing Arrangements relating to the Protection of Radiological Material

Radiological weapons and the potential use of radioactive material for hostile purposes have been on the international agenda since the beginning of the nuclear age. However, various political factors and negotiation complications resulted in an inadequate level of control exercised over radioactive materials, although these materials were frequently the main agents of concern in illicit nuclear trafficking incidents, especially in former Soviet Union countries targeted for theft.[10]
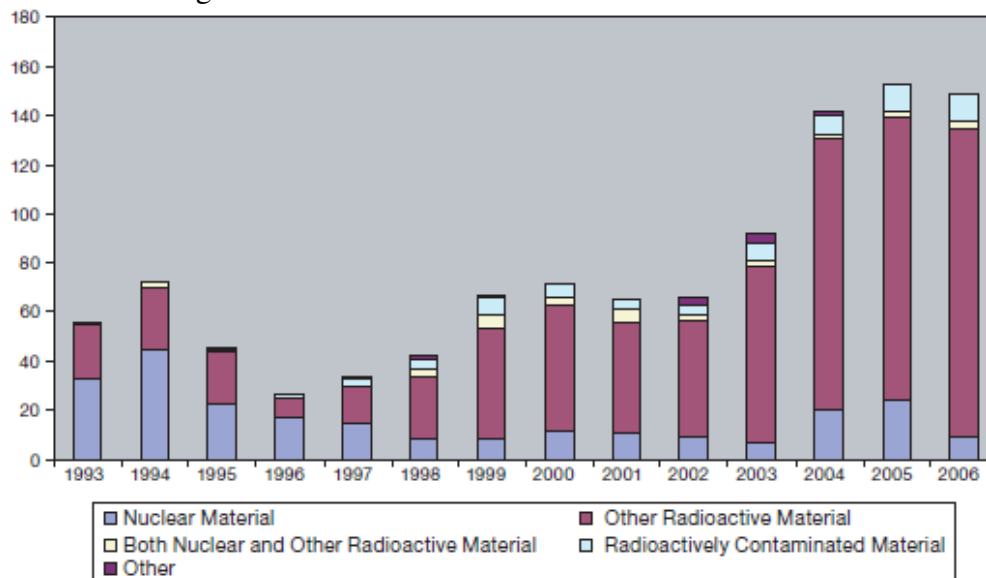
Figure: Incidents Confirmed to the Illicit Trafficking Database 1993-2006
(Source: http://www-pub.iaea.org/MTCD/publications/PDF/pub1309_web.pdf)

Radiological weapons have been on the agenda of the Conference on Disarmament (CD) since the late 1970's (agenda item entitled 'New types of weapons of mass destruction and new systems of such weapons; radiological weapons'). The CD worked extensively on negotiating a **Radiological Weapons Convention** between 1980 and 1992. In 1978, the General Assembly's Special Session on Disarmament called for the conclusion of a convention 'prohibiting the development, production, stockpiling and use of radiological weapons' – the purpose of this endeavour was to prevent states from acquiring radiological weapons. This item was added to the agenda of the CD in 1979, and in the following year an Ad Hoc Committee on radiological weapons was established, which from 1983 to 1992 was divided in two contact groups – one dealt with prohibition of radiological weapons, and the

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[10] The International Atomic Energy Agency's Illicit Trafficking Database recorded 1773 incidents between January 1993 and December 2009 that involved illegal movement of nuclear or radioactive materials, 351 of which were unauthorized possession of materials. According to the Database on Nuclear Smuggling, Theft, and Orphan Radiation Sources, 736 cases of 'orphan sources' had been either lost, accidentally found or misrouted between 1991 and 2009. Martin Matishak, Danger of Trafficked Nuclear, Radiological Materials Lingers, Global Security Newswire (16 November 2011), available at http://www.nti.org/gsn/article/danger-of-trafficked-nuclear-radiological-materials-lingers-experts/.

other with the prohibition of attacks against nuclear facilities.[11] The Ad Hoc Committee on radiological weapons was convened for the last time in 1992, after which the CD abandoned the topic due to irreconcilable differences regarding issues of verification and definition as well as disagreement over the required relationship between the ban on radiological weapons and the prohibition of attack against nuclear facilities and instead focused on negotiations of the Comprehensive Nuclear Test-Ban Treaty.

In the aftermath of the 9/11 attacks, the use or threat of use of radiological and nuclear materials by violent non-state actors and terrorist groups became a major concern, as members of Al-Qaeda expressed interest in acquiring means to catastrophic terrorism. With regard to guidelines on protection of radioactive material, the focus shifted from safety of the public and of employees to protection against theft and malevolent use. Indeed, in the last decade several arrangements relating to radiological material have been established. In the CD as well, an attempt was made to re-ignite discussions on the topic, but since the negotiating body has been absorbed in disputes over items (namely, nuclear disarmament, prevention of an arms race in the outer space, negative security assurances and the Fissile Material Treaty), it has been deadlocked and no progress has been made on any of the items.

While the work of the CD in 1980-1992 focused on prohibiting radiological weapons, the IAEA established a network of arrangements regarding the protection of radioactive materials, most notably its recommendations set out in its INFCIRC/225/Rev.4 from 1999, entitled '**Physical Protection of Nuclear Material and Nuclear Facilities'** (originally published in 1975 as INFCIRC/225), which complements the '**Convention on the Physical Protection of Nuclear Material'** from 1980. The Convention deals exclusively with nuclear materials used for peaceful purposes while they are transported internationally; an amendment, adopted in 2005 but not yet in full effect, extends its scope to include nuclear material in domestic use, storage, and transport, and the protection of nuclear materials and facilities against sabotage. In 2004, the IAEA published its '**Code of Conduct on the Safety and Security of Radioactive Sources'** (IAEA/CODEOC/2004). This revised version of a Code from 2001 mostly reflected the concerns, following 9/11, of *deliberate* acquisition of radioactive sources for malicious use, whereas before the central concerns were of theft out of ignorance.[12]

Beyond the efforts of the IAEA, the **Global Threat Reduction Initiative** from 2004, led by the United States, dealt with the physical protection upgrades of civilian nuclear and radiological sites worldwide, and the **UN Security Council Resolution 1540,** from the same year, called on states to enhance physical protection, border controls and accounting and securing of sensitive materials for the prevention of proliferation of WMDs to non-state actors.

In 2005, the **International Convention for the Suppression of Acts of Nuclear Terrorism** opened for signature and was intended to fill in the gaps regarding possible acts of nuclear terrorism which were not dealt with in the context of the Convention on the Physical Protection of Nuclear Material. It requires state parties to criminalize and penalize nuclear terrorism, defined as the use of nuclear/radiological materials with toxic, explosive or

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[11] Daniil Kobyakov and Nicolas Florquin, 'Dirty Bomb' Threat Awakens Dormant Disarmament Conference, Center for Nonproliferation Studies (26 August 2002), available at http://cns.miis.edu/stories/020826.htm.

A draft Treaty Prohibiting Radiological Weapons from 1983 can be found under the Report of the Committee on Disarmament, General Assembly Official Records of the Thirty-Eighth Session, Supplement no. 27 (A/38/27).

[12] Report of the International Commission on Nuclear Non-Proliferation and Disarmament (Gareth Evans and Yoriko Kawaguchi, co-chairs), Eliminating Nuclear Threats: a Practical Agenda for Global Policy Makers (2009), p. 120, available at http://icnnd.org/Reference/reports/ent/pdf/ICNND_Report-EliminatingNuclearThreats.pdf.

other dangerous properties for the purpose of killing or injuring persons, damaging property or the environment or for coercion of states and international organizations.

Most recently, the **2012 Seoul Nuclear Security Summit** included the consideration of protection against dirty bombs and attacks against nuclear facilities. The Seoul Summit took place after the Fukushima nuclear accident, which set the stage for a clear message on the overlap between safety and security of radioactive sources. The final Seoul Communiqué identified the need to strengthen physical protection and illicit trafficking of radiological materials, and encouraged international cooperation aimed at preventing radiological terrorism. These issues, as well as the non-state threat in this context, will be the focus of the next Nuclear Security Summit, to be hosted by the Netherlands in 2014.

Keynote Speech: A Middle East Zone free of Weapons of Mass Destruction – the subject of a Helsinki meeting projected for 2012

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The 2010 Review Conference of the NPT urged that a meeting should be held on the subject of a Weapons of Mass Destruction-Free Zone in the Middle East, and the meeting is currently projected to take place in Helsinki in 2012. With public attention today riveted on Iran's nuclear programme and only rarely focused on the Israeli nuclear weapons, it would be peculiar if a meeting were to be concerned only with 'weapons' and were to ignore the concern that Iran's nuclear enrichment programme might result in a weapon.

Would it not be possible for the states in the Middle East – including Israel and Iran – to initiate a discussion about a regional agreement under which all states in the region committed themselves not only to be without nuclear and other weapons of mass destruction, but also without facilities for the enrichment of uranium or production of plutonium?

The current stalemate in discussions with Iran

It is understandable that at a moment when the Gulf is full of warships and the air is full of speculation about attacks on Iranian nuclear installations, talks aim at limited measures to lower tension. Yet it would be unwise to focus exclusively on short-term measures and neglect thinking about comprehensive approaches – the more so as the narrow path followed has so far not led to any success. The meetings that have taken place this year between the P 5+1 and Iran in Baghdad and Moscow do not seem to have yielded any rapprochement. The P 5+1 seem to have demanded substantial early Iranian concessions on the enrichment issue, while Iran has continued to hold that it will under no circumstances forego its programme of enrichment.

Stalemated discussions may be affected by changes in costs and benefits. Perceiving Iran as intransigent and unreasonable, the US and the other Western parties seem unwilling to significantly increase the benefits that Iran would gain from an agreement. Instead, they seek to increase the cost for Iran of no agreement by strengthening and tightening economic sanctions and by not excluding subversive and military action. If the various parties have any conciliatory cards up their sleeves, they might prefer not to put them on the table at this stage.

From the US side there have earlier been some suggestions that after a settlement of the controversy and restoration of confidence, enrichment in Iran might be envisaged long-term. The Russian government has talked about a 'step-by-step' approach. It has not been rejected by Iran, but the steps do not appear to have been defined. There have also been suggestions to build on earlier schemes concerning the supply of 20 per cent enriched uranium fuel. Recent

accusations against Iran for sending weapons to the Assad government of Syria will add a new difficulty in any near-term talks between the P5+1 and Iran.

A meeting in Helsinki?

Nevertheless, the governments concerned in the Middle East region and non-governmental institutions in the region must give thought to the subject that the 2010 NPT Review Conference singled out for a meeting: a Middle East zone free of weapons of mass destruction and missiles to deliver them. Some things have already happened relating to this meeting, but many issues need to be clarified and agreed before it is to take place. Helsinki has been chosen as the venue and a Finnish diplomat has been appointed 'facilitator'. The date of the conference seems likely to be towards the end of December and the duration contemplated seems to be less than a week.

The list of **participants** and the **agenda** need be agreed **in advance** or else these matters could derail the conference at the outset. As we know from agreements about other weapon-free zones, it is above all the countries that form the region and that are ready to make commitments that should be present. In the case of the Middle East, the selection of most candidates for participation will not raise questions. In some cases there may be discussion.

Turkey has not traditionally been seen as a part of the Middle East. Yet as a state aspiring to use nuclear power and with significant influence in the area, Turkey's active participation in the conference – and potentially in a zone – could be important in practical terms. Its membership in the NATO alliance could be a complicating factor. A possible zone commitment to be free of nuclear weapons would hardly be incompatible with NATO guarantees of protection against nuclear attacks ('nuclear umbrella'). Even though the hosting of nuclear weapons under NATO has not been judged incompatible with the obligations under the NPT, the hosting of such weapons in a nuclear weapon-free zone would be a different matter. The idea of moving all NATO nuclear weapons to US territory has been under discussion within the alliance. However, it currently seems to be shelved.

It may have appeared almost axiomatic that the meeting requested by the 2010 NPT Review Conference would have to have the participation of both Iran and Israel. It is true that a zone agreement that either of these countries refused to join would have limited meaning and would probably not come into being. However, this is not the same as saying that the absence of one or both of these states at the meeting now projected would deprive it of meaning. Indeed, making the convocation of the meeting dependent upon their participation would be to make it hostage to conditions that either of them could advance. It might be wiser for the states that are willing to meet to do so and exchange ideas about concepts and features that they consider possible and desirable. It could be left to states that might choose not to take part in the meeting to consider under what conditions they might take part in subsequent sessions that may be scheduled.

At the present time it is not known whether Israel and Iran are prepared to participate in a meeting in 2012. At a juncture when the Israeli government wants to create the impression of its readiness to launch an armed attack against Iran, a positive response might look like a conciliatory step and therefore seems unlikely.

The Iranian government's logic might suggest a positive response, given that Iran does not have nuclear weapons, that it sees the possession of nuclear weapons as incompatible with its

religious faith and principles, and that it has a declared positive attitude to global nuclear disarmament.

The absence of either Israel or Iran from the conference would have some significant drawbacks, but could also eliminate road blocks. It might be assumed that Israel would argue that only confidence arising from a Middle East peace agreement would make a zone viable, while Iran might argue that nuclear fuel cycle activities permitted under the NPT should not be discussed. Neither stance would help the search for early accommodation and compromise.

Whatever the participation in the Helsinki conference, it would seem important that like-minded regional states that do not have the strong vested interests that characterize Israel and Iran get together and define along which lines they think the zone should be established – taking into reasonable account the interest of Israel and Iran as they see and understand them. While initiatives and pressures by outsiders might well be negatively perceived, regional states that neither have nuclear weapons nor fuel cycle activities might stand a somewhat better chance of finding lines that they consider acceptable and of taking into account the security and other interests of all in the region. The Gulf States and the Gulf States Council may be the most suitable party for taking on this delicate task before, during and after a Helsinki conference.

It has been rightly noted by many commentators that the conference in Helsinki should not be seen as a one-time event. Indeed, it is likely to be convoked for a rather short period of time – perhaps a week or even less. This would hardly be more than what is needed to launch some ideas and agree to explore them in further meetings.

What concept of a zone free of nuclear weapons (leaving for the moment the other WMD and missiles aside) could be contemplated?

We are not starting with a blank page. The idea of a nuclear weapon-free zone in the Middle East was advanced by Iran and Egypt in 1974 in the General Assembly of the UN. It has been on the table since then and even had consensus support. Originally, the zone concept was clearly rooted in the view that Israel should be brought into the group of regional states that renounced nuclear weapons. While voicing its support for the concept, Israel has always stated that such a zone can materialize only when peace has been established in the region.

As is the case with the NPT, zonal treaties – as we know them – aim at eliminating nuclear weapons. However, while zonal treaties need to be compatible with the NPT, they may differ from that treaty in several respects, apart from their geographical limitation. For instance, the NPT becomes binding for each state when it adheres, irrespective of what other states do. All Arab states as well as Iran and Turkey have adhered to the NPT and are bound by it, but Israel has not adhered to it, is not bound by it, and is assumed to have many nuclear weapons.

The entry into force of a zonal treaty may – as in the case of the Tlatelolco Treaty – be made dependent upon all parties in a specific geographic region adhering. It may also contain many different features that do not figure in the NPT. It may have systems of verification that differ from or go beyond NPT-type IAEA inspection, for instance, allowing parties to demand challenge inspections, allowing national inspectors to participate in the verification process etc. A zonal treaty could also create a legal basis for active cooperation (MidEastAtom?) in the development and use of nuclear energy, for instance regarding jointly

owned nuclear reactors for the generation of power, or the desalination of water, or for nuclear waste disposal sites.

Non-proliferation and the nuclear fuel cycle

While the zonal treaty for the Middle East has been on the international agenda for a long time, what has lately given it much attention has less to do with Israel's weapons than with the concern that Iran is developing a fuel cycle programme, including the construction and operation of plants for the enrichment of uranium. Although Iran itself denies any intention to make nuclear weapons, many suspect that such assertions are not true. Whatever the reality, the programme is making Iran a 'near-nuclear weapon state' and it is feared that other states in the region might emulate Iran's example, which would raise tensions in the region further.

It is true, as often stressed by Iran, that the NPT raises no obstacles to states that want to build fuel cycle installations – such as enrichment plants – for the peaceful use of nuclear energy. Japan, with over 50 nuclear power plants in operation, has both enrichment and reprocessing plants linked to its large peaceful nuclear power capacity. Brazil, with only a few nuclear power plants, has also developed a capacity to enrich uranium. Unlike Iran, neither Japan nor Brazil has met international objections.

It is clear that there would be little support in the international community for any international agreement – whether in the shape of a separate convention or an amendment to the NPT – under which states would renounce enrichment or reprocessing activities (perhaps for a specific period of time) in the interest of avoiding that any one becomes a 'near-nuclear weapon state'. States such as Canada, Australia, Namibia, South Africa or Jordan with large uranium ore resources might want at least to keep the option open of not only mining the raw material but also of enriching it for export sales.

At the same time there is understandable scepticism concerning widespread construction of fuel cycle installations in the world, especially as the global capacity for enrichment and reprocessing seems ample to respond to needs expected in the near future. Not every petrol-consuming nation needs an oil refinery of its own and not every state that uses uranium as fuel for nuclear power reactors needs an enrichment plant of its own.

It is also clear that enrichment – or reprocessing – plants in sensitive regions may be likely to raise concern and even suspicion. Although the NPT in principle allows states to develop capacities for enrichment and reprocessing, it does not oblige them to use this freedom. They can – if they wish – commit themselves to limitations on it for longer or shorter periods of time. Thus, undoubtedly with a view to creating mutual confidence, North and South Korea agreed in their Denuclearization Declaration of 1991 to forego the construction of both enrichment and reprocessing plants. The declaration may no longer have legal relevance, but it provides an interesting precedent: states can agree among themselves to renounce some activities (in this case enrichment) which they can resort to and that could be misused. They are obviously free to make any such agreement without any time limitation or for a specified period of time. Although the parties alone will be bound by such an agreement, they may feel a need for guarantees from third states regarding the supply of fuel for nuclear power plants that they operate.

The Middle East and the nuclear fuel cycle

States in the Middle East region might find it worth considering whether there would be a benefit in agreeing on a zone free not only of nuclear and other weapons of mass destruction and missiles, but also of fuel cycle activities – notably enrichment and reprocessing plants.

Iran might initially respond that nothing could move the country from exercising its right under the NPT to make full use of nuclear energy, including the right to a programme for the enrichment of uranium. It is true that Iran does not seem to have been tempted to abandon enrichment by offers of investments, support to become a member of the World Trade Organization, assistance to expand its civilian nuclear power programme, confirmation of the protection against armed attacks, etc. The outside world has had and still has difficulty in understanding this rigid attachment to a programme that can hardly be economical and that can hardly ensure long-term nuclear fuel independence. While many conclude that the ultimate aim of the programme is to make a nuclear weapon or at least to make Iran a near-nuclear weapon state, another explanation for the rigid position could be that continuation of the programme is above all a matter of national pride.

Starting from the premise that nothing could move Iran to abandon the enrichment programme, at the non-governmental level some experts have suggested acceptance of Iranian enrichment with maximum transparency, international inspection and perhaps international participation. While such arrangements could give reasonably early warning in case of an Iranian breakout, they could not physically prevent it. Inspectors could be thrown out and installations could be nationalized. While certainly not without value there would be limits to the confidence associated with such an arrangement. It might not be enough to discourage enrichment programmes among Iran's neighbours.

A zone free of both nuclear weapons and fuel cycle installations

A zonal agreement under which Iran would commit itself to completely suspend its uranium enrichment programme (and other fuel cycle services) for a specific and rather long period of time, under which other states in the region would commit themselves to forego enrichment for the same period, and under which Israel would commit itself to do away with its nuclear weapons, stocks of fissionable material and production capacity, might be a different matter. It would fit into Iran's declared wish to promote nuclear disarmament. Having been accused of being a country that threatens the non-proliferation regime and that deserves isolation, Iran would get credit for helping to consolidate non-proliferation in the region and even for helping to bring about tangible and long-sought nuclear disarmament.

Israel would undoubtedly initially reject any suggestion that would remove nuclear capacity that it has regarded as form of life insurance. Israel's ambition to remain the only de facto nuclear weapon state in the region has been displayed through the attack on Osiraq in 1981, the attack in 2007 on Syrian installations and by the threat of attacks on Iranian installations. Is this line of action considered sustainable, or is it possible that Israel could conclude that it might be better for its security if the country took the cost of doing away with its own – not acknowledged – nuclear weapons and capacity to make such weapons while gaining the benefit that no other state in the region would become even a near-nuclear weapon state?

There can be no illusions about the difficulties that would have to be resolved in designing and getting agreement about a zone as suggested above. However, the difficulties might be even greater in the construction of a zone renouncing only the weapons – leaving the fuel cycle untouched. It is implausible that Israel would go along with eliminating its nuclear weapons and leave Iranian enrichment untouched.

Many problems would have to be overcome. The supply of uranium fuel required for non-weapons related activities such as power plants would have to be assured and guaranteed by the outside world. Arrangements for effective inspection going beyond IAEA safeguards would have to be drawn up. Security guarantees might be needed. Steps by P-5 states toward nuclear disarmament would facilitate regional action. The exact geographical scope of a zone would need to be defined.

'Weapons' are the explicit object of discussion at the projected Helsinki meeting. The Chemical Weapons Convention includes a definition of chemical weapons, but the NPT does not define nuclear weapons. It should be made clear that not only deployed nuclear weapons, but also non-deployed weapons, weapons-ready material and installations to make the material can be covered in a zone agreement. It seems politically inconceivable at the present time to focus on Israel's nuclear weapons and disregard Iran's enrichment, and it seems equally impossible to consider Iran's growing enrichment and near-nuclear weapon status and disregard that Israel has hundreds of nuclear warheads.

Tiptoe, Stride and Leap: Steps Towards a WMD-free Middle East

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It is not necessary to change. Survival is not mandatory.[1]

For the whole of the last century, humanity has been grappling with the self-created spectre of weapons of mass destruction. Poisonous gases used in the First World War to kill approximately 100,000 people and disable some 900,000 others, were put to even deadlier use in the Nazi gas vans and chambers of the Second World War, killing millions of people. The invention and devastating use of nuclear weapons by the US on Hiroshima and Nagasaki Japan in 1945 led to an arms race between the US and USSR resulting in the manufacture of over 50,000 nuclear warheads and several near-miss events that brought the world closer to a global nuclear war than is commonly acknowledged.[2] Bioweapons have also been developed and – for the most part – discarded thanks to the growing understanding of their lack of military utility and their inhumane, disproportionate consequences. Applications of humanitarian principles to weapons and armed conflict led to the adoption of the 1972 Biological and Toxin Weapons Convention (BTWC, or simply just BWC) and the 1992 Chemical Weapons Convention (CWC).

With the exception of Israel, all states in the Middle East are members of the NPT and are subject to full-scope IAEA safeguards and a growing number have adopted the Additional Protocol including most recently, Iraq. Israel has declared that it will "not be the first to introduce" nuclear weapons to the region[3] although it is widely believed to possess a nuclear weapons capability. Despite such enthusiastic support for the NPT in the region, the majority of serious cases of non-compliance with NPT and IAEA safeguards have occurred in the Middle East.

A small but significant number of Middle East states are not members of the CWC and the BWC. Neither Egypt nor Syria have signed the CWC, and although both have signed neither has ratified the BWC. Israel has signed but not ratified the CWC whereas it is a non-signatory of the BWC. Syria is widely believed to have developed and deployed chemical weapons, including blister and nerve agents. The civil war in Syria has given rise to fears that the

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[1] Attributed to W. Edwards Deming, 1900 –1993.

[2] See Geoffrey Forden, False Alarms on the Nuclear Front, http://www.pbs.org/wgbh/nova/missileers/falsealarms.html; Alan F. Phillips, 20 Mishaps that Might Have Started Accidental Nuclear War, (January 1998), http://www.wagingpeace.org/articles/1998/01/00_phillips_20-mishaps.php; and Benjamin B. Fischer, A Cold War Conundrum. The 1983 Soviet War Scare, (Center for the Study of Intelligence, US Central Intelligence Agency), https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/a-cold-war-conundrum/source.htm.

[3] Avner Cohen, Israel and the Bomb, NYC: Colombia University Press, (1998), pp 207-15.

government may use chemical weapons against rebel forces and civilians and that non-state armed groups could obtain chemical and biological weapons in the aftermath.

Although subject to numerous arms control, reduction and non-proliferation agreements, nuclear weapons have not yet been the subject of a successful abolition approach in the same way as chemical and biological weapons. Regional nuclear weapon free zones however, have had an enormous positive impact, with the whole of the land mass of the southern hemisphere now covered by NWFZs, that also include significant parts of the northern hemisphere.[4] Addressing regional security via regional processes, frameworks and discussions has proved to be a successful method. This is not surprising. Those in the region best understand regional security dilemmas and more effective solutions can be found if regional partners agree to seek one together.

Proposals for a nuclear weapons free zone in the Middle East were first made in the 1960s and 1970s in reaction to increasing instability in the region and growing technical capabilities in the nuclear and missile realms. In 1962, a group of highly respected Israeli academics, spearheaded by Eliezer Livneh, formed the Israeli Committee for the Denuclearization of the Middle East[5] and proposed a zone stating that they viewed the development of nuclear weapons "to constitute a danger to Israel and to peace in the Middle East" urging the United Nations to intervene "to prevent military nuclear production". Iran and Egypt co-sponsored a 1974 UN General Assembly resolution calling for the establishment of such a zone. The Egyptian-Iranian resolution from 1974 has been adopted each year and, following the 1979 peace treaty with Egypt, Israel joined the consensus on the General Assembly resolution, which invites all states in the region to adhere to the NPT, place all their nuclear activities under IAEA safeguards, and—pending the establishment of an NWFZ—not to produce, test, acquire or station nuclear weapons on their territories and states that a Middle East NWFZ "would greatly enhance international peace and security". Israel's policy is indeed in favour of a regional approach and is linked to Israel's long-standing demand for full and mutual political recognition among all the states of the region and a resolution of the Arab-Israeli conflict; the Israeli nuclear capability being viewed as an existential issue.[6]

In 1990 Egypt proposed that the Middle East be made free from all weapons of mass destruction. In 1995, prior to the collapse of the Arms Control and Regional Security (ACRS) talks, the NPT Review and Extension Conference adopted the 1995 resolution on the Middle East, co-sponsored by the three depositary states—the Russian Federation, the United

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[4] http://www.un.org/disarmament/WMD/Nuclear/NWFZ.shtml. In approaching the Middle East zone it will be possible for participating countries to build on the experiences of: the Antarctic Treaty; the Treaty of the Tlatelolco for Latin America and the Caribbean; the Sea-bed Treaty; the Treaty of Rarotonga for the South Pacific; the Treaty of Bangkok for South-East Asia; the Treaty of Pelindaba for Africa; and the Central Asian Nuclear-Weapon-Free Zone Treaty. Guidelines for establishing nuclear weapon free zones, drawn up by the UN Disarmament Commission in April 1999, outline principles that include: establishing zones on the basis of arrangements freely arrived at among the states of the region concerned; initiatives emanating exclusively from states within the region concerned and be pursued by all states of that region; consultation of the nuclear weapons states (NWS) during the negotiations; ensuring that the zones does not prevent the use of nuclear science and technology for peaceful purposes and could also promote bilateral, regional and international cooperation.

[5] Cohen Avner, The Worst-Kept Secret. Israel's Bargain With the Bomb, NYC: Colombia University Press, (2010), p. 128.

[6] Avner Cohen and Patricia Lewis, Israel and the NWFZ in the Middle East: Tiptoeing down a 'long corridor', in: Bernd W. Kubbig and Sven-Eric Fikenscher (Eds.), Arms Control and Missile Proliferation in the Middle East, (Global Security Studies), London: Routledge, (2012).

Kingdom and the United States— as a fundamental part of the deal to extend the NPT indefinitely.[7]

The final document of the 2010 NPT review conference stressed the importance of a process leading to full implementation of the 1995 resolution on the Middle East and made the Secretary-General and the co-sponsors of the 1995 resolution responsible, in consultation with the states of the region, for the convening of 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. In 2011, Ambassador Jaakko Laajava of Finland was appointed facilitator and, following extensive consultations and preparations, the conference is scheduled to take place in Helsinki in December 2012.

Helsinki and beyond

Success at the Helsinki conference requires that all state participants will have to have a clear sense in advance of the meeting of what the likely outcome could be and, most importantly, what the boundaries of the possible outcomes would be. Success would likely take the form of a) a political declaration in which all parties confirm their commitment to the establishment of a Middle East free of weapons of mass destruction and b) an agreed follow-on process that deals with the technical aspects of a zone and scopes out a practical framework for the negotiation of the Zone. In addition, later if not immediately, a framework for higher political discussions encompassing a wider security dialogue for the region would be an important contribution to making speedy progress towards the zone.

Substantive work has been done by academics in regards to the content of a WMD-free zone treaty in advance of any future negotiations,[8] and much can be drawn from previously negotiated texts and work done in the past in ACRS. However, it is vital and practical that the regional states form their own issues for technical and political discussions and that they decide on the best process forward.

The technical track could, for example, consist of working groups dedicated to specific issues. These could be held in a staggered parallel formation, each track retaining a degree of independence from the other – although in reality there will be cross-pollination if only for the purposes of ensuring consistency in approach and terminology.

Judging from other similar processes, an umbrella committee that addresses scope, consistency guidelines and deals with overarching drafting issues could be established. This umbrella committee (a committee of the whole) would agree the mandates for the technical working groups and set their timetables, and function as the body to which all the technical working groups would report. The mandates and timetables would need to be addressed early on in the group and reconsidered periodically as progress was reported and monitored.

The umbrella committee could address issues of scope and determine how to apportion nuclear, chemical and biological weapons among the technical working groups. It has

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[7] The 1995 resolution called on all States in the Middle East "to take practical steps in appropriate forums aimed at making progress towards, inter alia, the establishment of an effectively verifiable Middle East zone free of weapons of mass destruction, nuclear, chemical and biological, and their delivery systems, and to refrain from taking any measures that preclude the achievement of this objective" and on all States party to the NPT, and in particular the NWS, "to extend their cooperation and to exert their utmost efforts with a view to ensuring the early establishment by regional parties of a Middle East zone free of nuclear and all other weapons of mass destruction and their delivery systems".

[8] See for example, N. Fahmy and P.M. Lewis, Possible elements of an NWFZ treaty in the Middle East, Nuclear-weapon-free-zones, in: Disarmament Forum, no. 2, UNIDIR (2011), and Lewis PM, Potter W, The Long Journey Toward a WMD-Free Middle East, in: Arms Control Today, (September 2011).

hitherto been widely accepted that chemical weapons and biological weapons would most likely be dealt with through the full regional application of the CWC and BWC respectively, incorporating an enhanced regional inspection and verification protocol, and the issue of nuclear testing prohibition would be done through the full regional application of the CTBT and its extensive verification regime. If states in the region can agree on this, then the technical groups on CW and BW could focus on those treaties, how to build trust and confidence in their applications through accountability measures, including verification means and inspections.

The umbrella committee could also address the declaratory portions of a future treaty including renouncing nuclear, chemical and biological weapons through refraining from conducting related developments and activities or through receiving second party assistance in such activities, or providing support to second parties in this regard. The scope could also include: prohibitions on transit and transfer and stationing WMD on the territories of all states in the region; a prohibition on testing; and a prohibition on armed and cyber attacks on civil nuclear facilities. The peaceful uses of the technologies and the rights to peaceful applications could also be dealt with under the scope of the treaty as could such matters as prohibiting the dumping of radioactive waste and related materials and measures to support nuclear security and safety.

Legal matters such as the settlement of disputes arising from differing interpretations, on reservations and on the conditions for signature, right to withdraw, amendments, ratification, depositaries, entry into force and duration could be contained within a legal aspects working group.

Technical working groups could be established to address technical aspects of nuclear, chemical and biological weapons that require special attention. In addition, working groups could be established to address fissile material controls, missiles, and verification. A technical working group on doctrines could be established the investigate ways in which the role of WMD could be reduced, devalued and delegitimized in the region, paving the way for an effective zone.

Missiles, other means of delivery and their proliferation, along with missile defences, would also need to be discussed in technical working group. It is not clear at all, how the full range of missiles could be addressed within the zone but it is possible to consider some types of measures to address and mitigate the fears they invoke, such as a regional flight test notifications mechanism and hotlines for crisis management.

Certain topics would be extraordinarily sensitive but will have to be addressed. In particular, these include declarations of existing to-be-prohibited weapons capabilities and the dismantling of any existing to-be-prohibited weapons capabilities. For chemical and biological weapons, this can be done through the extant treaties. However, unless a global Nuclear Weapons Convention is agreed in the intervening time period, the existing nuclear weapons capabilities will need to be dealt with.

There have been other examples of how to approach such difficulties. South Africa, for example, dismantled its nuclear weapons programme in 1989, subsequently inviting the IAEA to check and confirm that it was satisfied that the nuclear weapons capability had been dismantled and the remaining nuclear capability was solely for "commercial non-nuclear applications or peaceful nuclear usage".[9] This is a workable option to consider for the Middle East WMD free zone. In principle, the approach could also apply to any other capabilities in

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[9] IAEA General Conference, The denuclearization of Africa: report to the Director General, document GC(XXXVII)/1075, (9 September 1993), p. 11.

the region, whether they are embryonic or more advanced, nuclear, chemical or biological. In practice, it would be best to engage the IAEA, the OPCW and specialized UN BW inspectors as early on as possible.

Other topics such as declarations of existing facilities could be dealt with more easily in the working groups. Lists of declared facilities could be prepared for technical annexes with the provision for regular updates. A technical working group on negative assurances and support protocols could also be established that engages the NWS early on in that discussion, thus avoiding unnecessary confusion in the future.

A technical working group on verification and monitoring compliance could develop regional approaches to verification and compliance measures. Generally, NWFZs have included provisions for adherence to the full-scope safeguards agreement[10] and more recent zones call for adherence to the Additional Protocol[11]. Given the nuclear tensions and suspicions within the region, further, more revealing cooperative measures would likely be required. There are a number of models ranging from: extensive verification and compliance functions carried out by new standing institutions, as is the case in the Treaty of Tlatelolco; or reliance on existing international verification instruments supplemented with added reporting requirements, as in the Treaty of Rarotonga; or establishing a commission for the purpose of ensuring compliance that would gather its own information, interact with and transmit reports to the IAEA, and be able to call independently of the IAEA for clarification, technical visits and inspections, reserving the right to establish its own inspection mechanisms should the need arise, as in the Treaty of Pelindaba.[12] In addition, states could also consider the possibility of joint inspections with the IAEA, as in the case of the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC).

Measures to support the zone

Many regions have had positive experiences of confidence-building measures (CBMs) that are steps taken to build trust and confidence between parties, tangential to the treaty negotiations. In the Middle East however, there persists a strong perception that CBMs are, at best, diversions and, at worst, deliberate attempts to derail and delay the negotiations. However, there are distinct adjunct measures that could be agreed in support of – not in lieu of – a zone. Such supportive measures, if agreed speedily, could help create the constructive atmosphere and play the role that CBMS have played whilst not diverting attention away from the main goal.

Measures to support the zone could include, for example, interim negative security assurances whereby the NWS declare their commitment not to use or threaten to use nuclear weapons against any country in the regions during the negotiations and until the treaty has entered into force and the protocols are signed and ratified. Similarly, states in the region and those outside, including the NWS could make a commitment not to attack – including cyber attacks – civil nuclear, chemical or biological facilities in any of the states during the negotiations, and until the treaty has entered into force. Other measures to support could

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[10] IAEA, The structure and content of agreements between the Agency and states required in connection with the Treaty on the Non-Proliferation of Nuclear Weapons, document INFCIRC/153 (Corrected), (June 1972).

[11] IAEA, Model protocol additional to the agreement(s) between states(s) and the International Atomic Energy Agency for the application of safeguards, document INFCIRC/540 (Corrected), (September 1997).

[12] A number of countries in the Pelindaba Treaty would form part of the Middle East WMD Free Zone, they include Algeria, Egypt, Libyan Arab Jamahiriya and Morocco.

include counter terrorism measures, agreed regionally or bilaterally, and measures to reduce the likelihood of surprise attack – including missile transparency measures such as notification of missile tests and deployments of new missile types and the establishment of hotlines for crisis management. Nuclear safety and nuclear security assurance measures could be undertaken regionally, including early warning mechanisms for nuclear accidents and Interpol-supported alerts in the case of nuclear theft or sabotage. In addition, non-WMD measures could be included such as the multilateral observation of large-scale military exercises, military-to-military exchanges and transparency measures in the conventional forces domain. Such measures were agreed and established in the CSCE Helsinki Process, leading to the Stockholm, Vienna and Paris Accords and the CFE Treaty.[13]

Leaping from the nuclear track

Neither a wise man nor a brave man lies down on the tracks of history to wait for the train of the future to run over him.[14]

Throughout history the Middle East has made history through human conflict and cooperation. In the last two years, there has been increasing instability and turmoil in the Middle East and, simultaneously, growing hopes and opportunities. The Arab Awakening has resulted in relatively peaceful political change in Tunisia and Egypt so far, whereas all-out violent conflict erupted in Libya and Syria. The tensions between Israel and Iran over the nuclear issue threaten to escalate out of control and into a full-blown regional conflict. There is no framework in the region for security dialogue. No place in the region where government representatives can meet and listen to each other and thrash out their differences. It has been proposed that the United Nations – currently the only venue where states from the Middle East can all sit together and talk – establish a UN Regional Centre for Peace and Disarmament in the Middle East (as they have in Lomé, Kathmandu and Lima) to provide capacity building and a framework for security and political dialogue in the region.

Whatever the outcome of the 2012 Helsinki meeting, eliminating WMD in the Middle East is a vital issue that needs to be addressed. If the NPT avenue turns out to be a dead-end, then there will be other paths to explore – inside and outside UN structures. Pressure to make progress is unlikely to reduce; indeed the reverse may be true. States that may be considering nonparticipation in the process would do well to contemplate that decades of attempts to address this issue will not easily weaken and collapse because a single scheduled meeting does not bear fruit. Refusing to participate at this stage could well increase the level of discomfort down the road, when things are likely to be more not less difficult to untangle.

Nuclear, chemical and biological weapons pose enormous risks to humanity in the Middle East and a strategy of not talking about them and not dealing with them will not make then go away. In order to make progress, steps have to be taken that will induce fear – fear of change, fear of a different future and fear of grave error. All this is natural, justified and needs to be acknowledged. There is no risk-free option. Doing nothing however, is not an option. Do nothing will not bring about positive change and is likely – judging by trends – to be far more risky than opening up a negotiation. As the great scientist Francis Bacon observed: "Things

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[13] Patricia Lewis and Karim Kamel, A Helsinki Process for the Middle East? New discourse, new opportunities: Climbing ladders, taming snakes, in: Chen Kane (Ed.), A Helsinki Process for the Middle East, (Center for Noproliferation Studies, the Monterey Institute of International Studies), forthcoming 2013.
[14] Dwight D. Eisenhower, TIME magazine, (October 1952).

alter for the worse spontaneously, if they be not altered for the better designedly."[15] Indeed, as every successful peace negotiator will testify, in order to make progress, we first have to be vulnerable to the possibilities of change. The Middle East landscape is changing daily. Tiptoeing or taking baby steps in an attempt to reverse WMD developments while important is clearly inadequate. Whereas to use force and risk regional conflict could once more prove foolhardy by destroying people and things of great value in the name of security. A negotiation to remove all weapons of mass destruction, complete with an extensive and equitable verification regime could provide the stride we need to leap across the nuclear tracks of history, lest we be hit head-on by what is otherwise coming our way.

[15] Sir Francis Bacon, 1561-1626.

Abbreviations

ABACC	Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials
ABM Treaty	Anti-Ballistic Missile Treaty
ACRS	Arms Control and Regional Security
AEOI	Atomic Energy Organization of Iran
AEC	Atomic Energy Commission
AG	Australia Group
AP	Additional Protocol
APEC	Asia Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ARASIA	Cooperative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology
API	Arabic Peace Initiative
BM	Ballistic Missile
BTWC	Biological and Toxin Weapons Convention
BW	Biological Weapons
BWC	Biological Weapons Convention
CBRN	Chemical, Biological, Radiological, and Nuclear
CCA	UN Commission on Conventional Armaments
CD	Conference on Disarmament
CBMs	Confidence-Building Measures
CBW	Chemical and Biological Weapons
CFE	Conventional Forces in Europe
CNS	Convention on Nuclear Safety
CPPNM	Convention on the Physical Protection of Nuclear Material
CSBMs	Confidence and Security Building Measures
CSCE	Commission on Security and Cooperation in Europe
CTBT	Comprehensive Nuclear-Test-Ban Treaty
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organization
CW	Chemical Weapons
CWC	Chemical Weapons Convention
CWFZ	Chemical Weapons Free Zone
DPRK	Democratic People's Republic of Korea
DRDO	Defence Research and Development Organisation
DV	Delivery Vehicle
EOSG	Executive Office of the Secretary General
EURATOM	European Atomic Energy Community
FATF	Financial Action Task Force on Money Laundering
GCC	Gulf Cooperation Council
GICNT	Global Initiative to Combat Nuclear Terrorism
GP	Geneva Protocol
HCoC	The Hague Code of Conduct
IAEA	International Atomic Energy Agency
IAEC	Israel Atomic Energy Commission
ICNND	International Commission on Nuclear Non-proliferation and Disarmament
ICBM	Intercontinental Ballistic Missile

IDC	International Data Centre
IGS	Inertial Guidance Systems
IHR	International Health Regulations
IMS	International Monitoring System
INCSEA	Incidents at Sea
IND	Improvised Nuclear Device
INF	Intermediate-Range Nuclear Forces Treaty
LEU	Low Enriched Uranium
MEC	Middle East Conference
MECIDS	Middle East Consortium on Infectious Disease Surveillance
MEWMDFZ	Middle East Weapons of Mass Destruction Free Zone
MENWFZ	Middle East Nuclear Weapon Free Zone
MoU	Memorandum of Understanding
MTCR	Missile Technology Control Regime
NAM	Non-Aligned Movement
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organization
NNWS	Non-Nuclear-Weapon States
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NPR	Nuclear Posture Review
NSA	Negative Security Assurances
NTFZ	Nuclear-Test-Free-Zone
NWFZ	Nuclear Weapon Free Zone
NWS	Nuclear Weapon States
OPCW	Organization for the Prohibition of Chemical Weapons
OSART	Operational Safety and Review Team
OSCE	Organization for Security and Cooperation in Europe
PA	Palestinian Authority
PMD	Possible Military Dimension
RDD	Radiological Dispersal Device
SALT	Strategic Arms Limitation Talks
SAR	Search and Rescue
SESAME	Synchrotron-Light for Experimental Science and Applications for the Middle East
SLVs	Space Launch Vehicles
START	Strategic Arms Reduction Treaty
TRR	Tehran Research Reactor
UAE	United Arab Emirates
UAV	Unmanned Aerial Vehicle
UN	United Nations
UNESCO	UN Educational, Scientific and Cultural Organization
UNGA	UN General Assembly
UNIDIR	UN Institute for Disarmament Research
UNMOVIC	UN Monitoring, Observation, Verification and Inspection Commission
UNODA	UN Office of Disarmament
UNROCA	UN Register of Conventional Arms
UNSC	UN Security Council
UNSCOM	UN Special Commission
WHO	World Health Organization
WMD	Weapons of Mass Destruction
WMDFZ	Weapons of Mass Destruction-Free Zone