



Arms Control and Strategic Stability in the Middle East and Europe

Emily B. Landau and Anat Kurz, Editors

Memorandum
155

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June 2016

בקרת נשק ויציבות אסטרטגית במזרח התיכון ובאירופה

אמילי לנדאו וענת קורץ, עורכות

Graphic design: Michal Semo-Kovetz, Yael Bieber

Cover photo: Getty Images Israel

Cover design: Michal Semo-Kovetz

Printing: Elinir

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June 2016

ISBN: 978-965-7425-94-7

Contents

Preface	7
Part I: Following the JCPOA	
Iran's Road to Deliverable Nuclear Weapons Ephraim Asculai	11
JCPOA Provisions for Access to Suspect Sites: The IAEA, Iran, and P5+1 Risks Owen Alterman	21
From Oil to Nuclear Energy? The Development of Civilian Nuclear Programs in the Middle East Yoel Guzansky and Gallia Lindenstrauss	33
Part II: NATO and Missile Defense	
NATO's Nuclear Deterrence in the Post-Ukraine Era Azriel Bermant	49
Unwilling to Succeed: The Czech Position on US Missile Defense – Between Strategy and Public Political Debate Irena Kalhousová	63
Part III: Israel's Strategic Dilemmas	
Israeli Deterrence in the 21st Century Avner Golov	83
Israel and Strategic Stability in the Middle East Shlomo Brom	99
From Nuclear Disarmament to "Strategic Stability": Implications for Israel of an Emerging Global Debate Emily B. Landau	115
Contributors	127

Preface

This collection of articles on nuclear proliferation, deterrence, arms control, and national security is the outgrowth of a multi-year project at the Institute for National Security Studies (INSS) under the auspices of the INSS Arms Control and Regional Security Program. It is the third and final volume in a series of edited volumes that with the support of a generous grant from the Hewlett Foundation further our goal to encourage researchers to develop expertise in the realm of arms control. The changing global landscape, with new strategic challenges emerging at both the international and regional levels, makes it imperative for analysts and strategists to sharpen thinking on a host of new dilemmas relating to the control of nuclear weapons. These dilemmas include the need to rein in determined and dangerous proliferators, as well as to bolster national security and maintain manageable deterrent relationships where nuclear weapons continue to exist.

The first theme addressed by the articles compiled here is the ongoing challenge of Iran's nuclear program and activity, which continues despite the deal concluded in the summer of 2015. The terms of the Joint Comprehensive Plan of Action (JCPOA) raise some difficult issues for arms control practice and analysis. The deal has created some new standards, which pose questions about its relationship to the NPT. Moreover, it sets precedents both for inspecting Iran in the future and for other non-nuclear weapons state members of the treaty. Against this background, Ephraim Asculai examines the thorny issue of Iran's missile program – one critical component of a working nuclear weapons capability that was left outside the negotiations with Iran, and is not covered by the deal – and Owen Alterman tackles the issue of inspections at suspect sites in Iran in the coming years. Yoel Guzansky and Gallia Lindenstrauss assess civilian nuclear programs in the Middle East emerging in this new atmosphere.

The articles by Azriel Bermant and Irena Kalhousová move the discussion to the international arena, with the former focusing on the challenges that

NATO faces in conducting an effective nuclear deterrence strategy that balances the need to respond to new Russian challenges against the desire to avoid unintended escalation. The article that follows zeroes in on the strategic and political dilemmas that arise for one state – the Czech Republic – when considering US missile defense plans.

In the final group of articles, Avner Golov examines dilemmas that Israel faces in the realm of deterrence in the new millennium, and Shlomo Brom and Emily Landau both assess the notion of strategic stability in a Middle East context. Brom focuses on state interests and relations in the region, while Landau assesses the implications for Israel of the global debate on nuclear matters that has shifted over the past decade from nuclear disarmament discourse to policies that increasingly reflect a perceived need to maintain nuclear deterrence and strategic stability. Previous versions of these latter two articles were first posted on a closed website managed by the Program on Strategic Stability Evaluation (POSSE) in July 2014, and we are pleased to acknowledge the generous support of POSSE, sponsored by the Carnegie Corporation of New York.

As in the other volumes in this series, the authors represented in this collection are a diverse group that both individually and together make new and important contributions to arms control research in Israel. Departing from the previous volumes in the series, however, this collection includes three articles by seasoned arms control experts alongside essays by younger researchers, to reflect the nature of the work on arms control at INSS, which proceeds individually and as part of the collective contribution to the field.

We would like to thank Judith Rosen, editor at INSS, for her expert editing of this volume, and to Moshe Grundman, Director of Publications at INSS, for his assistance. Above all, thanks to the authors of the articles for their important research and their contributions to this effort.

Emily B. Landau and Anat Kurz
Tel Aviv, May 2016

PART I

Following the JCPOA

Iran's Road to Deliverable Nuclear Weapons

Ephraim Asculai

11

JCPOA Provisions for Access to Suspect Sites:

The IAEA, Iran, and P5+1 Risks

Owen Alterman

21

From Oil to Nuclear Energy?

The Development of Civilian Nuclear Programs in the Middle East

Yoel Guzansky and Gallia Lindenstrauss

33

Iran's Road to Deliverable Nuclear Weapons

Ephraim Asculai

The Joint Comprehensive Plan of Action (JCPOA) that was signed between the P5+1 and Iran in July 2015 deals mainly with the production of fissile materials, i.e., enriched uranium and plutonium, and to a large degree ignores the development of the nuclear explosive device and avoids mentioning the possible delivery systems of nuclear weapons. This neglect was intentional, and as such casts doubt on the integrity of the entire deal. Indeed, there is so much evidence that points to the existence of an explosive mechanism development program – in addition to Iran's declared missile development program and achievements – that can, in its longer range components, have but one purpose, namely, the delivery of nuclear weapons. Two events in 2015 heighten the anxiety that accompanies the Iranian nuclear issue: the announcement that Iran had developed a long range cruise missile, and the announcement that Iran had developed a long range precision guided missile, which it tested in October.¹

This essay will deal with the two neglected aspects of Iran's nuclear program, the development of the explosive mechanism, and the potential for delivering nuclear weapons to targets – in the Gulf area, the Middle East, and beyond. The issue of the production of the fissile materials will be mentioned only briefly, since it was dealt with extensively in the JCPOA. The chapter assesses the available information concerning Iran's potential for developing the explosive mechanism of a nuclear device, and reviews the available means for the deployment, delivery, and use of its nuclear potential.

The three stages of development of nuclear weapons can proceed, and probably are proceeding, almost in parallel. Only at the final stages must the three be united into one deliverable nuclear weapon. From the available evidence, this is the situation in Iran. In the summer of 2015, Iran's potential

for the production of military capable High Enriched Uranium (HEU) was almost unlimited.² Although in the future the JCPOA is supposed to reduce the stocks of enriched uranium available for immediate enrichment to HEU levels, the machinery will not be destroyed; as such, the timetable for a breakout is extended, but not indefinitely.

Design of the Nuclear Explosive Mechanism

Although in principle one would prefer a nuclear explosive mechanism that is as small and compact as possible that can be delivered by as many means as possible, this goal can be achieved in stages, according to a schedule dictated by the regime. Given the availability of a sufficient amount of fissile materials, should the Iranian authorities want to demonstrate their nuclear prowess as soon as possible, they would probably resort to an underground test demonstration. For this purpose, they could be satisfied with a “clumsy” assembly of the exterior components of the explosive mechanism, outside the nuclear assembly, and do away with delivery mechanisms that would need to be robust and withstand the chosen means of transport to their destination. There are many precedents for this choice, beginning with the Soviet Union and continuing with the other members of the P5, India, Pakistan, and North Korea. Only South Africa later admitted that it skipped this stage in its development of nuclear weapons because its design was almost foolproof, the so-called “gun assembly.” This was a wasteful use of highly enriched uranium (HEU), but the design was so robust that the developers did not see the need for a demonstration test.

An underground test would have several advantages for Iran: it would demonstrate to the world Iran’s nuclear capabilities; the setup is much simpler, since it does not depend on a delivery system that could have additional failure mechanisms; the test is an excellent means of checking the design of the explosive mechanism and assessing it, later providing the basis for further improvements; and, in the case of total failure, Iran would be able to deny the entire affair.

Table I charts the amounts of fissile material needed for the production of cores for nuclear weapons.³ Note that both the HEU and plutonium quantities listed are lower than those designated by the International Atomic Energy Agency (IAEA) as Significant Quantities (SQ), 25kg for HEU and 8kg for plutonium. These latter SQs are probably more precise for the production of the first core, since some waste is unavoidable during the melting and

machining of the materials, but these are recoverable and can be used in the next runs.

Table I: Amount of fissile material needed to build a nuclear bomb

HEU (enriched to 90 percent U-235)	Simple gun-type nuclear weapon	90 to 110 lbs. (40 to 50 kg)
	Simple implosion weapon	33 lbs (15 kg)
	Sophisticated implosion weapon	20 to 26 lbs. (9 to 12 kg)
Plutonium	Simple implosion weapon	14 lbs. (6 kg)
	Sophisticated implosion weapon	4.5 to 9 lbs. (2 to 4 kg)

Assessments are that Iran received from Pakistani sources the design of its nuclear implosive mechanism, which is derived from the first Chinese design. This is supposed to be composed of the inner HEU core, the neutron initiator, the envelopes of the core (tamper, neutron reflector) and the external explosives envelope that is designed to detonate simultaneously (implode) and contract the fissile materials into a high-mass super critical ball. This super critical ball is then bombarded by neutrons from the neutron initiator, which in turn initiates the high speed nuclear reaction – namely, the nuclear explosion. The radius and weight of this spherical setup is determined by the mass of the fissile material used. The more material used, the larger and heavier the entire setup will be. Thus, in general, the HEU core will need a much heavier assembly, which in turn will be reflected in the dimensions and specifications of the delivery system.

Achieving implosion is a difficult task, and is traditionally done by composing the spherical explosives envelope of 32 explosive pentagonal and hexagonal “lenses,” much in the way that the classic leather soccer ball covers are designed. These must be exploded simultaneously, in order to achieve the necessary explosion shockwave symmetrically at the fissile material core. In 2009, the *Guardian* published a report claiming that Iran had successfully developed a two-point detonation system that would transform the assembly into a much smaller and more foolproof arrangement.⁴ Not many details are known about this design, but it would no doubt help lower the assembly weight and increase its robustness, since coordination of the

two-point explosion is much simpler than the explosion of the 32 lenses in the more common design.

The other technical problem encountered in the development of the explosive mechanism is injecting a high number of neutrons into the compressed core at the right moment. There are several means of doing so, and Iran was discovered to have been producing a radioactive substance called polonium-210, whose only use is to produce neutrons by combining it with the metal beryllium. This combination produces a sufficient number of neutrons for the initiation of the nuclear chain reaction. There are two major problems with this method: the polonium must be produced in a reactor (and is hardly available on the open market) and it is relatively short-lived, so it cannot be “on the shelf” ready for use, but rather must be restocked periodically.

Another method for producing neutrons for the initiation of the chain reaction was apparently studied in Iran, that of placing a compound known as uranium deutride(UD3) at the center of the core. When rapidly compressed, this would produce the required neutrons.⁵

In principle, the design of the explosive mechanism would be similar for both HEU and plutonium, although the dimensions and consequently the weights of the assembly components would be significantly different. Although specific information is not available, it is generally estimated that the nuclear payload of the first Iranian nuclear weapon would be approximately 750kg.

Delivery Systems

In setting out to design any military delivery system, the main parameters to be taken into consideration include:

- a. Payload physical characteristics – dimensions; weight; environmental requirements
- b. Delivery system characteristics: range; speed of transport; route
- c. Readiness requirements

For nuclear weapons delivery systems, the process could be somewhat reversed: in other words, the main constraint would center on the nature of the explosive mechanism, and the physical characteristics of the mechanism would determine which delivery means could be used. While the above parameters have been generally discussed, the changing Middle East scene could alter these, and not for the better, from an international point of view.

While a few years ago the distances to potential targets from Iran were well defined, the situation is changing. The assumed country of target, at least as evidenced by Tehran's public rhetoric, has always been Israel. The "Great Satan," the United States, was never the main intended target for Iranian nuclear weapons. The declared goal of eradicating the "Little Satan," Israel, was assisted by the intensive development of long range missiles, capable of reaching Israel. But Iran was not satisfied with this range, and thus developed missiles with increasingly longer ranges, capable of threatening portions of Europe, Russia, and parts of the African continent. These ranges were calculated for launches from mainland Iranian territories. With the changes in the geopolitical picture and Iran gaining footholds elsewhere, the ranges to some targets are becoming much shorter and the means of delivery more versatile.

Although the ultimate delivery system for Iran would be missile-based, there might also be non-military means of delivery. Recognizing Iran's past record of support for terrorist activities, this should be taken into account regarding a potential Iranian nuclear arsenal.

In early 2015, Iranian nuclear weapons could only be enriched uranium-based. As of JCPOA implementation, Iran does not have the capability of producing plutonium at Arak, although the situation could change in the more distant future, regarding other nuclear reactors. This restriction would make the payload far heavier than plutonium-based warheads.

Non-Military Delivery Systems

Iran, a state with a proven terrorist record and a supporter of terrorist organizations, might resort to the delivery of nuclear weapons by non-military means. These could include sea-transportable means such as vessels, containers, and disguised cargoes such as large machineries; land transport via large trucks, tankers, and innocent-looking cargoes; and air transport means, such as passenger/cargo aircraft flying along commercial routes and deviating to their targets at the last possible moment. This would be akin to a suicide mission, but in the current Middle East chaos it is an option that cannot be discarded. If the air option is chosen, the range from the takeoff airport is almost unlimited. Thus, the non-military options have the advantage of less strict specifications for the explosive mechanism, since it will not need to be encased in a robust casing withstanding a large range of

environmental conditions. In addition, the restrictions on the payload weight would be less stringent than for the military options, to be discussed next.

The Military Delivery Options

The difference between the technical requirements for non-military and military nuclear weapons delivery is significant. The packaging of the nuclear explosive mechanism into a military delivery system must be robust and able to meet a much wider range of specifications, including temperature, acceleration rates (g-forces), and vibrations, to be able to withstand the extreme conditions during transport to the destinations. This means that all functions of the device must perform exactly as they would during static conditions, which is difficult to effect.

The range of the many military delivery options for nuclear weapons is wide and varied. They range from personal-carried weapons, to field artillery nuclear weapons developed by some nations and nuclear landmines, to military aircraft delivering nuclear weapons, to missiles of varying ranges and capabilities. The missile option would range from a single nuclear weapon warhead to those carrying several warheads and capable of multi-targeting, with a wide range of nuclear yields and effects. Iran, as a beginner, does not yet have the capacity to produce such a significant variety of mechanisms, but given time, its capabilities will surely grow.

As of 2015, Iran's air force was rather old and dilapidated, and a published report of late 2014 includes a chapter entitled: "The Iranian Air Force: A Weak and Aging Force."⁶ This issue concerns the ranges from the launch sites to targets. Although Iran threatens Israel with destruction, its potential targets could also include almost any of its neighbors, and primarily the Gulf states. At a much lower probability, Iran would be able to use outposts beyond its own territory, such as Syria, as launch sites. Thus, even with an old and rundown air force, with limited air-to-air refueling capabilities, Iran could be capable of launching an air strike, limited in range. The situation could change when Iran would be able to replenish its aging stocks with newer military aircraft, including refueling capabilities, and rumors abound as to this possibility.

Notwithstanding the above discussion, Iran's missile program appears to be the more serious threat to Middle East peace, and, with increasing ranges, to some parts of Europe as well. Iran has developed several models of long range missiles, many of them based on Russian and North Korean models.

The models encompass a range from several dozens to several thousands of kilometers. There are reports that deal with the models and sub-models of these missiles, and the literature should be referred to if necessary.⁷ The range of the missiles is determined in combination with the payload: the heavier the payload, the shorter the range.

Until the appearance of newer types, and given the estimated nuclear payload, the Shahab-3M is the one that could be targeted against Israel. The Sejil is a solid-propellant 2-stage rocket that has ranges of more than 2000 km and an estimated payload of 750kg. Thus, the potential of attacking its close neighbors – the entire Middle East and with increasing ranges, also parts of Europe – is becoming very realistic.

Discussion

The preceding sections have been primarily technical. However, a full analysis of the issue goes well beyond a purely technical review, and must take the nature of the Iranian regime into account. Iran is a nation determined to develop both nuclear weapons and their means of delivery. The JCPOA, while likely to delay any preset timetable, also provides Iran with financial breathing space on the one hand, and the promise of a better future for its nuclear program, on the other. In the not so distant future, Iran will be able to return to the full range of nuclear development, with the possible exception of plutonium production, although this could also be well on the program.

The problems that are barely addressed in the JCPOA are related to the two major topics discussed above: the development of the explosive device, and the development of the means of delivery. The first is addressed vaguely in the JCPOA, and the second not at all. As mentioned, these stages can be worked on in parallel with the production of fissile material, and probably greatly precede it. Moreover, the development of the explosive mechanism cannot truly be detected by technical means, since these mechanisms involve only very small quantities, if any, of radioactive materials. The Commission, which includes the P5+1, the EU, and Iran, must have very good and well-based reasons for demanding access to suspicious sites, and it will be close to impossible to produce them in this case.

Another issue that is cause for anxiety is the possibility that Iran has or will have a concealed parallel program for enriching uranium. Iran is a huge country, and the potential for hiding enrichment facilities, especially if they are small scale, is virtually unlimited. Coupled with the explosive

mechanism, even without military delivery systems, they could bring about a profound political and military change in the region.

Is the option for non-military delivery systems viable? Indeed, yes. Iran's behavior, internally and on the international scene, could indicate that it is not above using any means to gain its objectives, and the use of such systems cannot be ruled out. This could mean that if Iran were to carry out a nuclear underground test, it would be on the verge of a non-military deployment capability, as a minimum achievement. It could certainly be more advanced than that.

Is the possibility of using launch sites outside Iran realistic? This question is difficult to answer. There are many precedents: the US worldwide, the USSR in Eastern Europe, and France and the United Kingdom in their areas of influence. Iran, with its grand leadership aspirations, could well come into this category. Iran seems to have few inhibitions regarding issues that involve the international community. Thus, it would be prudent to keep this possibility in mind and analyze any piece of intelligence relating to this possibility.

Once again we come to the issue that is troubling many – the possibility of discovering Iranian activities that are forbidden by the NPT and the JCPOA, especially activities relating to the second and third stage of the nuclear project. Because under the terms of the deal Iran succeeded in neutralizing almost all possibilities of uncovering such activities by the international verification teams, it is left to individual countries to do their utmost to uncover and disclose these activities. It is a difficult task, for both technical and political reasons. It will be very difficult to inspect any site and installation without crews on the ground, and it is uncertain that the international community, represented by the Commission, will have strong enough political will to uncover illicit activities. Unfortunately, and taking a cue from the behavior over the course of negotiations, this could possibly be the case. Once the sanctions are removed, Iran could be in a position to do whatever it wishes, with very few inhibitions. Iran has always found a rationale to justify its deeds and will do so in the future, even when these contradict its international commitments and obligations.

Notes

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- 2 “Iran’s Nuclear Timetable,” Iran Watch, November 18, 2015, <http://www.iranwatch.org/our-publications/articles-reports/irans-nuclear-timetable>.
- 3 “Weapon Materials Basics Fact Sheet,” Union of Concerned Scientists, August 2004, <http://www.ucsusa.org/nuclear-weapons/nuclear-terrorism/fissile-materials-basics#.ViO3nOGhdIE>.
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- 6 Anthony H. Cordesman, *Iran’s Rocket and Missile Forces and Strategic Options*, Center for Strategic and International Studies, October 2014, http://csis.org/files/publication/141007_Iran_Rocket_Missile_forces.pdf.
- 7 “Design Characteristics of Iran’s Ballistic and Cruise Missiles,” Nuclear Threat Initiative, updated, January 2013, http://www.nti.org/media/pdfs/design_characteristics_iran_missiles_3.pdf?_=1360355163; see also “New Document Reopens Question.”

JCPOA Provisions for Access to Suspect Sites: The IAEA, Iran, and P5+1 Risks

Owen Alterman

Introduction

Over the course of negotiations on the Iranian nuclear issue, one recurrent central question was: How could the parties to a signed deal access sites that are suspected of Iranian nuclear activity? For the P5+1 states, the core purpose of the agreement was to place limits on Iran's nuclear program. This could be accomplished through repurposing and monitoring Iran's known sites and nuclear-related materials. Still, the Iranians could cheat, turning to sites and materials unknown to outside actors. For that reason, those skeptical or critical of Iran demanded a rigorous process for access to suspect sites, and P5+1 governments responded by bargaining for an access and inspection process.

The final bargain disappointed and angered skeptics and critics. They (and the US administration as well)¹ had called for "anytime, anyplace" inspections, whereby inspectors could enter a suspected site anywhere in Iran without prior notice. Until the final stage of negotiations, P5+1 governments pledged to stand firm on the "anytime, anyplace" condition. In the end, they settled instead for "managed access," an inspection process that provides for prior notice to Iran before an inspection and denies inspectors all access to what Iran deems "military" sites.

The Joint Comprehensive Plan of Action (JCPOA) "managed access" process involves a number of steps. First, the International Atomic Energy Agency (IAEA) presents Iran with a set of questions and seeks Iranian clarification.² Iran then provides its reply.³ At that point, if not satisfied by Iran's explanations, the IAEA delivers a request for access to the site.⁴ That, in turn, starts a 24-day process during which Iran can offer objections, the

parties to the agreement reach a decision (by majority vote) on whether to allow the inspection to proceed, and then the inspection takes place.⁵

As a matter of policy, the P5+1 parties may not be eager to pursue a suspect site inspection that could endanger the continuity of the nuclear deal. Even if a P5+1 party does seek an inspection, though, the agreement's managed access provisions present a set of core risks. These risks arise because the agreement grants a number of actors significant control over the suspect site access process. More specifically, the agreement presents three risks: the IAEA could refuse to try to access the site; Iran could substantially delay the inspection process; and three members of the EU/E3+3 (the P5+1 plus the European Union) could side with Iran and together block an inspection. To see an inspection process through, an interested P5+1 party would need to exercise leverage against each of these actors, as any one of them can torpedo the process.

This article explains, actor by actor – the IAEA, Iran, and the P5+1 – the role that each plays in the process, and the tools a P5+1 party that seeks an inspection could use to exercise leverage. Some of these tools might also be instruments Israel could use, even though it is not one of the P5+1. After analyzing the different dynamics, the article offers an overall assessment of how the inspection process would likely unfold – and how the potential disagreements could undermine the Iran nuclear agreement as a whole.

The IAEA Risk

The IAEA has a central role in the JCPOA process for access to suspect sites – no less than a monopoly over access requests. In other words, the IAEA is the only actor charged with initiating the access process. As Paragraph 75 of the JCPOA's Annex I reads, “*if the IAEA has concerns* regarding undeclared nuclear materials or activities, or activities inconsistent with the JCPOA, at locations that have not been declared under the comprehensive safeguards agreement or Additional Protocol, *the IAEA will provide* Iran the basis for such concerns and request clarification” (emphasis added).⁶

The IAEA first “must have concerns” and then “provide” Iran with the information. A P5+1 government (or any other government) may not initiate an inspection on its own. For that reason, decision making at the IAEA could prove crucial. Should a P5+1 party want to act within the framework of the JCPOA and see inspections through, it would need to secure IAEA assent. Moreover, Paragraph 78 of Annex I further permits the IAEA to agree

with Iran on “alternative arrangements” – i.e., other than inspections – for verifying Iranian compliance with the deal.⁷ Here, too, the IAEA wields considerable authority. And beyond the formal process described in the Annex I text, the IAEA would also likely report on its findings directly to P5+1 governments or through the agency’s Board of Governors, and thereby influence governments’ decisions.

In all these steps, the agency’s decision making would prove crucial. In the past decade, the IAEA has won some respect for its professionalism, including from those critical of the Iran nuclear deal.⁸ This reputation may well have been a factor leading the P5+1 states to delegate to the IAEA such substantial authority in JCPOA implementation. That said, the JCPOA will remain in force for an extended period, and institutional dynamics can change. While the presumption of IAEA professionalism may be sound, those interested in the Iran nuclear issue should at least be aware of the risks and potential consequences of changes in the IAEA’s approach.

The agency’s decision making involves internal technical and policy discussions among IAEA staff. Still, critical decisions surrounding access to a suspect Iranian site would presumably require, in the first instance, authorization from the agency’s top official, its director-general, to whom agency staff ultimately report. The orientation of the director-general, then, could have a significant impact on JCPOA implementation. If it is able to persuade the director-general, or if there is a like-minded director-general already in office, an interested P5+1 state could have reasonable confidence that the IAEA would not obstruct an inspection that should be carried out.

For that reason, the question of who serves as director-general will be a crucial one throughout the term of the JCPOA. The director-general is appointed to a four-year term⁹ by a two thirds vote of the IAEA Board of Governors,¹⁰ composed of member state representatives designated or elected to one or two-year terms.¹¹ Once the Board of Governors appoints a director-general candidate, that candidate must be approved at the IAEA’s general conference, composed of all IAEA member states (currently 165).¹² Both the Board of Governors and general conference votes are decided on a one-state, one-vote basis, leading to the choice of a new director-general.¹³

The current director-general, Yukiya Amano, has historically been viewed as close to the United States,¹⁴ and in the run-up to Amano’s initial election in 2009, US diplomats, mindful of the high stakes, invested substantial energy in bolstering his candidacy.¹⁵ Perhaps because of that closeness, the issue of

“IAEA risk” – the risk that the agency would scuttle JCPOA enforcement – has not figured prominently in the debate over the agreement. But the JCPOA may well outlast Amano. Indeed, Amano’s current term expires on November 30, 2017,¹⁶ and the 2017 IAEA election could be a seminal event garnering significant policy and media attention. Interested parties in the JCPOA – whether the P5+1 states, Iran, or third parties such as Israel – can be expected to devote energy and resources toward the election process. In order to have confidence that the IAEA would not obstruct an attempt to inspect an Iranian site, P5+1 governments seeking implementation of the JCPOA will likely invest considerable energy in seeing a favorable candidate selected as director-general.

The director-general, then, makes initial decisions, including a decision whether or not to inspect a suspected Iranian nuclear site. Nonetheless, even the director-general lacks ultimate authority in the IAEA. That authority is conferred on the Board of Governors itself. As set out in the Statute of the IAEA, “The Director General shall be responsible for the appointment, organization, and functioning of the staff *and shall be under the authority of and subject to the control of the Board of Governors*. He shall perform his duties *in accordance with regulations adopted by the Board*” (emphasis added).¹⁷ The IAEA’s Board of Governors rules add that the director-general “shall be guided by the policy of the Agency” and “shall bring to the Board’s notice as a matter of urgency any fact which may require its intervention, in order to enable it to take any necessary action within the scope of its functions.”¹⁸

The IAEA Board of Governors thus holds the ultimate keys to agency decision making, whether through the selection of the director-general, or through the placement of the director-general “under [its] authority and subject to [its] control,” or through “regulations adopted” or Agency policies that “guide” him. Another important geopolitical context, therefore, is who sits on the Board of Governors. The annual selection of new Board members each September¹⁹ is thus important an event, as significant as (or perhaps even more than) the director-general selection. Particularly significant is the September 2016 stage in determining the Board for 2017, since that Board will both exercise the usual supervisory function and also appoint a director-general (for the new term beginning December 2017).

Members of the Board of Governors are selected through the IAEA Statute’s complex formula, designed both to incorporate states most advanced

in nuclear technology and to guarantee regional diversity.²⁰ Most members of that 2017 Board are already known. The list of states most advanced in nuclear technology – designated as Board members without standing for election – is unlikely to change materially. Eleven additional states were chosen in September 2015 to serve two-year terms that run through September 2017.²¹ The Board's 2017 composition will be completed in September 2016 with the election of member states to 2016-2018 Board terms. That election and future votes should garner attention from P5+1 states, given the authority of the Board over JCPOA implementation – and the fate of inspections in particular.

Beyond acting to influence the selection of the director-general and Board of Governors, the P5+1 could wield leverage through their funding of the IAEA. Unlike Board or director-general selections, this leverage could be exercised at the time of an inspection request itself. That is, while a director-general is selected for a four-year term (and is then replaced only with difficulty) and Board members are elected to two-year terms, leverage over funding can be exercised at least on a yearly basis. A threat to withhold funding could be leveraged to influence IAEA decision making. Under the IAEA's system of "mandatory assessed contributions," the United States is responsible for providing more than 25 percent of the agency's 2016 budget.²² Combined, the P5+1 supply nearly half of the budget (including significant contributions from Britain, France, and Germany).²³ Murmurs of withholding funding already came from Capitol Hill when the IAEA refused to disclose its side agreement with Iran over Parchin inspections.²⁴

These sources of potential leverage over the IAEA could give a complaining P5+1 state some influence over the agency's inspections decision. Nonetheless, the IAEA's role in the inspection process is clouded with two primary wild cards: a director-general who otherwise controls decision making and is difficult to remove, and a Board of Governors with so many states as members. "IAEA risk," then, is a significant – and not fully appreciated – element in the effort to contain the Iranian nuclear program. The agency's record of professionalism provides a basis for confidence that the risk will not materialize. However, were the risk to materialize, the complexity of managing it could prove an Achilles' heel for the JCPOA regime as a whole.

The Iran Risk

Unlike the risk posed by potential IAEA obstruction, Iran's role in the inspection process was a prominent issue in the debate over the nuclear deal. Still, while the risks are well understood, commentators have devoted too little attention to management of those risks.

A key locus of Iranian leverage within the JCPOA document has been well-identified. While the Obama administration has described inspections as a 24-day process, the document stipulates otherwise. Before the 24-day clock begins to tick, Iran must reply to a set of IAEA questions – and the inspection provisions set no deadline by which Iran must present its answers.²⁵ To be sure, the agreement's good faith clauses provide some textual support for limiting Iranian obfuscation. Paragraph 28, for example, commits each party to “implement this JCPOA in good faith and in a constructive atmosphere, based on mutual respect, and to refrain from any action inconsistent with the letter, spirit and intent of this JCPOA that would undermine its successful implementation.”²⁶ Were Iran, hypothetically, not to respond for ten years, it would be breaking this promise, and thus any reasonable reading of the document would likely demand a deadline at some point.

That said, the document still does not set a specific deadline, potentially sending the parties down a rabbit hole of ambiguity. In their July op-ed on the inspections provisions, Hillel Fradkin and Lewis “Scooter” Libby assumed that Iran would need a well-founded reason for delay but could still point to several rationales. “Iran will presumably want to know what prompted the IAEA's concern,” they noted. “The suspect site identified by the IAEA is likely to be remote, and Iran will no doubt say that it must gather skilled people and equipment to responsibly allay IAEA concerns. Iran may offer explanations in stages, seeking IAEA clarifications before ‘completing’ its response. That could take a while.”²⁷ Others joined in their criticism.²⁸ Iran, then, could well delay inspections for a time while remaining within the parameters of the good faith clause.

Given this risk of obstruction, what leverage could an inspection-seeking P5+1 state use to ensure Iranian cooperation? The JCPOA itself provides one answer: avoiding the inspections process altogether and triggering the agreement's termination (or “dispute resolution”) clause in Paragraph 36 of the main text. If the IAEA has approached Iran with a request for access, the origin of that request may well have been from a P5+1 state that approached the IAEA. If a P5+1 state approaches the IAEA, then that state believes that

Iran is using a site to violate the deal and thus that Iran is “not meeting its commitments under this JCPOA.”²⁹ That enables the P5+1 state to skip the inspections process altogether and proceed directly to what the agreement labels as a “dispute resolution” process. In practice, the dispute resolution process is a way for a state to threaten to terminate the deal, at least in part. Once a party sits through 30-35 days of meetings, it can leave the agreement (again, either in whole or in part).³⁰

The JCPOA has no exhaustion clause, no provision that requires a “complaining party” – to use the Paragraph 36 phrase – first to inspect and only then to complain. Some might argue that a requirement to inspect is imposed by the JCPOA’s good faith clauses cited above: according to this argument, the inspection provisions are part of the deal and were a focus of attention. They must mean something. If so, the United States – or another of the P5+1 – would have some duty at least to try to inspect. Yet while there is merit to this argument, the perception of Iranian obfuscation or lack of good faith eclipses the prior need to inspect. In any event, the complaining state need not prove its argument before a court, but rather have a serious argument that gives it sufficient legitimacy to act.

Many have questioned whether in practice the threat of termination would exert real pressure on Iran, especially in the later years of the term of the JCPOA,³¹ once the main benefit to Iran – the lifting of sanctions – would have occurred years earlier. Prior long term business deals would be permitted to continue under the agreement’s grandfather clause.³² Full termination and snapback sanctions, even in part, would prove difficult for the P5+1. It might be that a P5+1 state might not view exiting the agreement, even in part, as consistent with its interests. However, the option exists, with a reasonable argument that inspections are not needed if Iran obfuscates. While interests and circumstances change over time, that element of the document is now frozen in place.

Still, as with the IAEA, the option of exiting the deal might not prove sufficient leverage for managing the potential risk of Iranian obstruction. The document may provide Iran with sufficient means to delay IAEA access enough to avoid meaningful inspections. In that case, securing Iranian cooperation would require a broader use of carrots and sticks, essentially a renegotiation of the terms of the agreement that could include, for example, concessions on Iran’s geopolitical standing in the Middle East.

The P5+1 Risk

Another actor that can impact on the inspections process is the P5+1 group of states and the European Union, sitting as part of the Joint Commission. That Joint Commission is the body established by the JCPOA as its implementation and dispute resolution forum, with representation by each of the P5+1 states, the European Union, and Iran.³³ Under Annex I, an inspection cannot proceed if four or more members of the Joint Commission object.³⁴ For Western governments, the intent of this provision was to blunt Russia and China's capacity, on their own, to block an inspection. The JCPOA provision meets that requirement since it requires an inspection to go forward even if only five Joint Commission members – for example, the United States, Britain, France, Germany, and the European Union – seek it. Nonetheless, an inspection-seeking P5+1 state cannot, on its own, force an inspection. This presents the risk that other P5+1 parties would block an inspection that should take place.

The JCPOA governs relations between Iran on the one hand, and the P5+1 on the other, such that the document itself offers little direction on how the P5+1 can resolve internal disagreements. This, in fact, has fueled some of the main criticism of the deal: the concern, for example, that the financial interests of European companies would prevent European governments from taking action needed for meaningful implementation.³⁵ In fact, the document offers little recourse for a lone complaining P5+1 state other than exiting the agreement under the Paragraph 36 termination clause.

Thus, an inspections disagreement would become not a legal issue but a diplomatic one, folded into the overall bilateral and multilateral relationships among the P5+1 states. A P5+1 state seeking an inspection would need to bargain with others in the P5+1 (and European Union) to secure the additional four votes needed to pass Joint Commission review. That bargaining could include the full scope of issues in broad and complex bilateral and multilateral relationships. Because of the wide scope of issues and the changing natures of the bilateral relationships involved, the nature of the bargaining is hard to assess prospectively.

Assessment

Implementation of the Iran nuclear agreement carries risks for those seeking to block Iran's path to nuclear arms. Identifying those risks is only the first stage, however; policymakers must also concentrate on how best to

manage them. The inspections provisions involve risks not only of Iranian obstructionism but also of potential lack of cooperation from the IAEA or P5+1 governments. In particular, the risk of IAEA non-cooperation has received too little attention. The identity and orientation of future directors-general and the Boards of Governors could prove crucial. Equally plausible are threats to exit the agreement and moves at renegotiation, and here too the document provides only limited guidance on how to manage the Iran risk and the P5+1 risk. For the Iran risk, the only real solution offered by the document is an exit ramp toward termination. For the P5+1 risk, the document offers no guidance at all.

A document such as the JCPOA is most durable if it sets out clear instructions for handling sensitive issues, hashing out contested points in a manner that reduces friction and makes smooth implementation more likely. However, the document's inspections provisions supply little recourse (and, for the Iran risk, even provide a textual basis for Iranian obduracy). Instead, remedies lie outside the framework of the agreement. That means either leaving the agreement (in favor of sanctions or military force) or negotiating in order to secure everyone's participation.

Negotiation could be limited to the issue at hand (i.e., the proposed inspection), or it could expand to include wider issues of the nuclear deal or of geopolitics. A common perception is that the Iranian nuclear issue will be governed for ten to fifteen years (or beyond) by fixed terms in the JCPOA. Those terms, though, are susceptible to renegotiation in the wake of a disagreement over how to handle inspections. Such disagreement could be not only with Iran but with the IAEA and P5+1 as well.

The inspections provisions demonstrate a fundamental instability in the nuclear accord. For enforcement, the JCPOA relies on IAEA verification, Iranian cooperation, and some measure of P5+1 concord. The absence of any of these could render the deal's terms unenforceable, or at least ripe for renegotiation. Managing the risks of the JCPOA might be achieved only by terminating or renegotiating the deal. That may give policymakers some tools, but the outcome is unpredictable and unstable. The P5+1 might well succeed in blocking the covert path to an Iranian bomb, but at what cost? What would Iran – or the IAEA or P5+1 – demand in return? We do not know.

Notes

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From Oil to Nuclear Energy? The Development of Civilian Nuclear Programs in the Middle East

Yoel Guzansky and Gallia Lindenstrauss

In recent years, several Middle East states have begun developing civilian nuclear infrastructures in their territory. In this respect, the UAE has progressed most among the Arab states – the planned reactors are already under construction – and it is expected to be the first Arab country to use nuclear energy within its borders. Turkey is also quite advanced in this regard. Construction of the first reactor, expected to be operational in 2022, began in April 2015. In March 2015, Jordan signed an agreement for the construction of two nuclear reactors with Rosatom Atomic Energy, a Russian state corporation. Egyptian plans call for four completed nuclear power stations by 2025. Even Saudi Arabia has recently sent out feelers to outside companies for the purpose of developing civilian nuclear energy on its soil, and has started building the technological and scientific infrastructures required.

The various states claim that their decisions to develop civilian nuclear programs are motivated primarily by energy needs. Indeed, in most of the countries under discussion, rapidly increasing energy needs are not met by existing infrastructures; furthermore, renewable energy, such as solar and wind power, is insufficient and can provide only a small fraction of current energy demands. Nonetheless, there is real concern that in the future these projects could serve as springboards for the development of military nuclear programs. This concern is amplified by the fact that some of the states refuse to waive (even in principle) their right to develop the capabilities for enriching uranium and separating plutonium on their soil.

Given the technical complexity and tremendous resources required even for starting the development of a civilian nuclear infrastructure, it is not at all clear if the respective states will be able to realize their nuclear plans, some of which are very ambitious indeed. At the same time, the concern about a possible future transition from civilian to military capabilities requires close monitoring of nuclear developments in the nations of the region.

A Survey of Civilian Nuclear Programs in the Middle East¹

Egypt: Egypt suffers from a chronic deficit of electricity, and many blackouts result from a lack of fuel for electricity production. Furthermore, the nation suffers from a deficit of potable water, and the intention is to use nuclear power for desalination. In 2006, the Egyptian government began to show renewed interest in developing a nuclear power program, and announced renewed investments in the field and partnerships with international companies. Although former President Husni Mubarak announced the start of construction of a nuclear power plant in el-Dabaa (west of Alexandria along the Mediterranean coast) as long ago as 2010, the project suffers from delays and has, to date, not progressed in any significant way. In 2012, the Egyptian Electricity and Energy Ministry announced that notwithstanding the political upheavals, the decision was made to continue the program promoted under Mubarak aimed at completing construction of four nuclear power plants by the year 2025.²

Egypt is increasingly looking to nuclear energy as a solution. However, despite the existence of a considerable reserve of nuclear scientists and engineers, only two small research reactors are currently operating in Egypt. In el-Dabaa, the site designated for Egypt's first nuclear power plant, only preliminary work on the reactor has begun. Construction was halted in January 2012 when local armed residents seized control of the area and vandalized equipment, claiming that their rights to the land had been violated, and only in January 2016 was work resumed. The International Atomic Energy Agency (IAEA) reported that during the unrest in el-Dabaa, radioactive material was stolen from one of the onsite labs, providing a demonstration of the challenges Egypt faces when it comes to reactor safety and security.³ In October 2013, in a speech marking the fortieth anniversary of the October War (after the site was retaken by the Egyptian armed forces and a promise made to build a new tourist resort to create employment opportunities for locals), acting President Adly Mansour announced a relaunch of the program

to build a nuclear power plant, slated to be operable in 2020, that would ease Egypt's chronic electricity shortage.⁴

Egypt, which in recent years has faced tremendous political, security, and economic challenges, is hard pressed to locate the requisite economic and political resources to maintain the nuclear program. Because of its economic woes, the Electricity and Energy Ministry's assessment is that construction of the el-Dabaa nuclear power plant will have to depend on external financing for 85 percent of the project.⁵ During Russian President Vladimir Putin's visit to Egypt in February 2015, the sides signed a memorandum of understanding whereby they would join forces in building the first nuclear power plant in el-Dabaa.⁶ South Korea and China are also looking into the possibility of entering into joint ventures with Egypt; in May 2015, China even signed a memorandum of understanding that mentions "cooperation in constructing nuclear reactors."⁷ The main stumbling block to the project is the question of financing. On November 19, 2014, Egypt and Russia signed an agreement that Russia would build four nuclear power plants in Egypt with a capacity of 1,200 MW each, and would grant Egypt a \$25 billion loan to cover the cost of construction.⁸

Jordan: The rising demand for energy in Jordan, the lack of oil reserves (the kingdom imports about 90 percent of its energy), and the ongoing interruptions in both oil supplies from Iran and gas supplies from Egypt because of regional upheavals are all factors motivating the country to establish civilian nuclear capabilities within its borders. The rising demand for energy for electricity production and for future desalination plants also stems from the influx of hundreds of thousands of Syrian refugees. Jordan would like to exploit its large deposits of uranium ore (about 2 percent of global reserves are located in the Hashemite kingdom),⁹ and hopes that the reactors to be built there will run on uranium mined on Jordanian soil.

Jordan is a signatory to the Nuclear Nonproliferation Treaty and was the first Middle East nation to sign the Additional Protocol (1998). Jordan would like to build a civilian nuclear infrastructure, but lacks the scientific knowledge to do so, and has therefore reached out to the international community for help. In 2009, Jordan and a South Korean company signed an agreement on the construction of a small (5 MW) research reactor, based on uranium enriched to 19 percent, to be provided by the French company Areva.¹⁰ In March 2015, Jordan also signed an agreement with the Russian company Rosatom over the construction of two reactors in northern Jordan,

each with a 1,000 MW capacity.¹¹ The first reactor is expected to enter operation in 2024, and the second in 2026. The deal totaled \$10 billion, with Rosatom putting up 50 percent of the financing.¹² Jordan, which initially asked Washington for assistance, began negotiating with the Russians after rejecting an American demand that it not operate a nuclear fuel cycle on its territory. As of the time of this writing, the parties had not yet reached agreement on the particulars for financing the project. Beyond the project's steep price tag, there are also serious geological risk factors. Jordan itself acknowledged this by requesting Israel to provide scientific data, a request that was accommodated.

Turkey: Because Turkey has virtually none of its own energy sources and demand is on the rise there too, the nation has for several decades – and even more so at present – worked to develop a civilian nuclear program. The goal of Turkish decision makers is to have five nuclear power stations based on 20 nuclear reactors up and running by the year 2030. As of 2016, Turkey had only a single nuclear power plant (with four units, each with a capacity of 1,200 MW) whose construction was started by Rosatom in Akkuyu on the coast of the Mediterranean, and it is expected to be operable in 2022.¹³ Turkey committed itself to buy most of the electricity to be produced by the plant, but the reactors themselves will remain in the hands of the Russian company, which operates using the BOO (build-own-operate) model. Similarly, Rosatom will be in charge of recycling the fuel. In April 2016, the Russian company announced its plans to sell 49 percent of its reactor ownership to private (apparently Turkish) companies. While the sale of shares was Rosatom's original plan, this announcement came earlier than expected. Whereas some relate this to difficulties in financing due to the economic problems in Russia, other have linked this announcement to the growing tension between Russia and Turkey following the downing of the Russian jet by Turkish jets in November 2015.¹⁴ In fact, the deep crisis between the states had sparked concern in Turkey that the whole project was in jeopardy.

In January 2015, it was revealed that some of the signatures of the engineers who supposedly prepared the environmental impact study for the Akkuyu reactor had been forged, raising serious questions about the study's validity.¹⁵ Nonetheless, the Turkish energy minister noted in April 2015 that Akkuyu is the safest structure in Turkey, capable of withstanding an earthquake measuring 9 on the Richter scale, and that no earthquake of that

magnitude had ever struck the country.¹⁶ While the Turks had hoped that by 2023 there would be three operational nuclear power stations, construction is behind schedule (and even the first plant will probably be inaugurated two years later than planned).

As for the second nuclear power plant, designated for Sinop, on the Black Sea, a bilateral agreement between Turkey and Japan for construction on the BOT (build-operate-transfer) model was signed in October 2013.¹⁷ A French company will also take part in the work, and completion of the plant is planned for 2023. The Turkish-Japanese agreement was the first time Japan sold a nuclear power plant since the Fukushima disaster, which likely lent the Turks a relatively strong bargaining position. In particular, Turkey insisted on including a clause, albeit vaguely phrased, that would seem to provide the country with the possibility of enriching or recycling nuclear fuel should it want to do so.¹⁸ This is the first practical manifestation of a previous declaration by Turkish President Recep Tayyip Erdogan (when he was still Prime Minister) that Turkey retains the right to develop independent fuel cycle capabilities.¹⁹

The third nuclear power will be built in Igneada district, 10 kilometers from the Bulgarian border.²⁰ The proposal to build it on the Black Sea near the Bulgarian border aroused fierce opposition from Bulgaria. In November 2014, it was made public that Turkey was initiating contact with the US-based Westinghouse, which is currently part of the Japanese conglomerate Toshiba, with cooperation of the Chinese State Nuclear Power Technology Cooperation (SNPTC).²¹ By constructing this plant, the Turks hoped to reduce their dependence on foreign entities and give Turkish companies a more dominant role.²² Even if this expectation proves unrealistic, however, due to the lack of sufficient know-how in Turkey, one can assume that contracts for building this plant will include clauses that refer to a measure of partnership with locals.

Gulf states: Recent years have seen a growing awareness of nuclear energy, at least on the declarative level, because of the need to meet rising energy demands. Another factor motivating this trend is the Iranian nuclear program, both because of the need to respond to it with independent nuclear development, even if symbolic, and in an attempt to increase pressure on the United States and the international community to resolve the crisis to the satisfaction of the Gulf states. Iran's determination to continue with its nuclear project has prodded the Arab Gulf states to advance joint as well as

separate projects designed to develop nuclear infrastructures and knowledge. Moreover, the agreement between Iran and the P5+1 that recognizes Iran's "right" to retain enrichment capabilities on its soil has prompted other nations – led by Saudi Arabia – to demand this "right" for themselves as well.

UAE: Although the UAE possesses one of the largest oil reserves in the world, it is advancing a civilian nuclear energy program, given the drive to reduce air pollution (the country is one of the biggest per capita polluters in the world), meet a rapidly rising demand for electricity, boost economic growth, and diversify the country's energy mix. By 2020, the UAE's electricity consumption is expected to hit 40 GWs, while at present its production capabilities can provide only half of that. Motivated by this forecast, the UAE in 2009 began preparations for developing a civilian nuclear infrastructure, and the expectation is that by 2020 about one fourth of the country's energy needs will be provided by nuclear power. Joining this motive is the desire to have alternate energy sources as a way to protect the nation's natural resources and reserve them for export, as well as the positive effect such an achievement would have on the UAE's prestige in a field associated with modernization and technological progress.

Compared to the other states discussed, the UAE has made the biggest strides in terms of establishing the necessary nuclear power institutions, legislation, and contracts for cooperation with other nations, and has done so in record time – less than one decade from formulation of a strategy to its expected realization, i.e., operation of the first nuclear reactor and its connection to the electric grid. The wealthy federation managed to overcome economic, legal, and logistical obstacles on the road to acquisition of the first civilian nuclear program in an Arab nation. The program, already in an advanced construction stage, includes the building of four reactors, the first of which can be expected to be operable as early as late 2017.²³

Many in the international community see the UAE's nuclear program as meeting the highest standards of cooperation with international bodies, including the IAEA, regarding nuclear safety and nonproliferation, in part because the UAE a priori waived the goal of uranium enrichment on its soil and will rely on imports of nuclear fuel from other states (the so-called gold standard). The case of the UAE is unique and cannot be expected to serve as a model for future nuclear development programs in other countries, as some had hoped. The fact that the UAE conceded its right to operate a fuel cycle within its borders does not indicate the start of a regional trend, as

evidenced by agreements the United States signed subsequently and public demands made by nations such as Saudi Arabia about their “right” to enrich uranium.

Saudi Arabia: The kingdom has embarked on a civilian nuclear program designed to provide its energy needs, reduce dependence on oil, and perhaps even expand its oil export capabilities. At the present rate of consumption, by the end of the next decade Saudi Arabia is liable to find itself providing most of the oil it produces for its own internal needs. A nuclear infrastructure would also expand the industrial base in Saudi Arabia and provide training and employment opportunities to many Saudis. Accordingly, the kingdom embarked on a series of projects and signed agreements of cooperation with several nations, among them South Korea, the United States, France,²⁴ and Russia, and with China – most recently in January 2016, on the construction of a high-temperature gas-cooled reactor (HTR)²⁵ – as well as agreements with Arab nations, such as Jordan. It was also reported that Saudi Arabia has begun to select sites for the reactors and that the construction of the first one should be completed by 2020. According to the Saudi government, the plan comprises the building of 16 nuclear reactors to produce electricity and to power desalination plants, and is one of the largest projects ever undertaken within its borders, requiring an investment of more than \$100 billion over two decades (making the kingdom the biggest marketplace in the world in the field of civilian nuclear power).²⁶

The kingdom has yet to begin construction on the reactors (the start is slated for 2017), but as early as 2010 it decided to establish a renewable and nuclear energy research campus in Riyadh for laying the groundwork and training personnel for various projects.²⁷ By the end of the project, Saudi Arabia wants to be able to provide half of its energy needs from nuclear and renewable sources. On several occasions, the kingdom has signaled that it will not waive its right to enrich uranium on its soil, as Iran received exactly the same right through its nuclear agreement with the world powers.²⁸ These hints have aroused the suspicion that Saudi Arabia has nuclear ambitions that are not only civilian. Furthermore, there is no guarantee that the kingdom will agree to any commitment in exchange for international aid, as was the case with the UAE, which also included an acceptance of the Additional Protocol.

In the absence of suitable infrastructures, know-how, and facilities, a Saudi nuclear program whose core is the ability to enrich uranium is a

long term proposition. In Riyadh's view, Iran's nuclear agreement gives the kingdom about a decade during which Iran will have to show restraint on the nuclear front. Saudi Arabia hopes to be able to examine various nuclear options available in the NPT framework within this window of opportunity.

Transition from Civilian to Military Nuclear Programs?

While a civilian nuclear project can help meet the rising energy demands of the region's nations, many are concerned that in the future, nuclear activity might be diverted from the civilian side to the development of military nuclear capabilities. Indeed, only two non-European nations with developed nuclear infrastructures – Japan and Mexico – did not at some point look into the idea of developing military nuclear power.²⁹ Given that some of the region's states have already considered developing military nuclear capabilities, and some have even amassed nuclear knowledge and harnessed cooperative nuclear ventures, and given the threat that Iran's nuclear program poses to the region and the region's growing instability, this concern is hardly trivial.

Although Egyptian Presidents Anwar Sadat and Husni Mubarak rejected the idea of developing military nuclear power, not all the relevant Egyptian elements were in agreement. Egypt is an NPT signatory and has been a long time and vocal supporter of making the Middle East a nuclear weapons-free zone,³⁰ but Egypt is frustrated that this position has encountered significant opposition. Furthermore, the upheavals in the Arab world make Egypt's vision seem farther than ever from realization. Egypt refuses to sign the Additional Protocol, which would allow the IAEA to conduct much closer inspections of Egyptian facilities.³¹ While Egypt stresses its energy needs as the reason for its desire for a nuclear power program, its regional importance and the fact that it continues to sport its traditional role as leader of the Arab world could, in the future, prompt it to opt for the development of military nuclear capabilities. Egypt has what it takes to promote such a project, both in terms of its technological infrastructure and in terms of manpower. Its decision whether to pursue nuclear arms is primarily a political decision, and likewise depends on willingness to allocate the financial resources. Yet despite various declarations, Egypt has to date undertaken very little nuclear development, and the nation's political and economic instability is sure to hinder it even more.

Similar to Egypt, considerations of prestige and regional position could motivate Turkey at some point to transition to a military nuclear program.

However, unlike the other states under review, Turkey, as a NATO member, is covered by the organization's nuclear umbrella. In this sense, it would seem that Turkey has no use for its own military nuclear program, and Turkey has in fact signed all the key treaties on the nonproliferation of WMD (including the Additional Protocol). On the other hand, rising tension between Turkey and other NATO members,³² along with the concern that when push comes to shove, NATO members will not come to Turkey's aid, is motivating Turkey to seek a more independent foreign policy. In particular, Turkey's insistence on retaining the right-in-principle of uranium enrichment (even though it lacks the independent means to do so for now) amplifies the concern that Turkey wants to keep all of its options open.

Jordan and Saudi Arabia, like Turkey but in contrast to the UAE, refuse to waive their right to enrich uranium or separate plutonium within their borders. The discovery of uranium deposits in Jordan has made Amman more determined than before to oppose a ban on uranium enrichment. While Jordan would find it very difficult logistically and financially to develop a military nuclear program, Saudi Arabia would – at least in terms of financial resources – find it much simpler. Over the years, the Saudi financial support for Pakistan's nuclear program was a basis for the common belief that if Saudi Arabia asks Pakistan to use its nuclear capabilities to help Saudi Arabia, such help will be forthcoming. In the past, the possibility was raised that in a scenario of an Iranian breakout to nuclear weapons, Pakistan's commitment to the kingdom's security would be manifested by stationing Pakistani nuclear weapons on Saudi soil, or by helping transfer the technology needed by Saudi Arabia to launch its own nuclear program. Indeed, it appears that Saudi Arabia believes that in the event of an Iranian breakout to nuclear weapons, Pakistan will come to its aid in one way or another, even if perhaps the two sides interpret the understandings between them differently.³³ All of this would be motivated by the kingdom's growing concern about a possible Iranian breakout to nuclear arms manufacturing under the mantle of the agreement with the West that eases the economic sanctions imposed on Iran. While the agreement with Iran is not expected to generate the launch of a military nuclear program in Saudi Arabia immediately, the agreement has already made Riyadh – in tandem with an unprecedented level of conventional arms buildup – adopt a strategy that seeks to keep all nuclear options on the table.

Given the nuclear agreement concluded between Iran and the P5+1, Saudi Arabia will find it difficult to stand idly by, even if only motivated by the desire for greater prestige and influence, and will likely decide to present an answer – if only partial – to the Iranian threat. In many ways, US security guarantees are a preferable solution for the Saudis, but even if the United States provides Saudi Arabia with security guarantees – and so far it has avoided doing so – it is doubtful that the kingdom would deem them sufficient. Riyadh is also weighing the option of promoting a nuclear weapons-free zone, but the kingdom's fear that in certain scenarios it could find itself confronting an increasingly powerful Iran on its own is liable to reinforce its drive to have other available options. More than any other actor in the Middle East, Saudi Arabia has a strategic motive and the economic wherewithal to make military nuclear capabilities a reality.

Conclusion

The development of civilian nuclear energy could well serve states lacking significant energy resources of their own, such as Jordan and Turkey, as well as states unable to provide the energy needs of their populations, such as Egypt. In this sense, a civilian nuclear project could prove to be a stabilizing element if it has a positive impact on those states' economic development. Nonetheless, other than the Gulf states, the nations need significant external financing in order to make headway with nuclear projects. Russian dominance in the financing and building of the first nuclear power reactors in Turkey, Jordan, and Egypt is readily apparent, as well as in extensive Russian-Saudi Arabian cooperation on nuclear ventures.³⁴ In April 2016, Rosatom announced it opened a regional office in Dubai.³⁵ While this could be seen as an element that strengthens Russia's position in the region, the opposite could occur if the difficulties faced by the Russian economy itself impede progress in the projects to which it is already committed. This may have already been evident in the proposed sale of Rosatom shares in Turkey's first nuclear plant, although this may be also the result of Russian-Turkish tensions.

Although the biggest concern about civilian nuclear programs in the Middle East has to do with their potential as springboards for military nuclear programs, an important restraining factor is the relationship of the nations under discussion with the United States. Traditional US policy has been to oppose fiercely nuclear proliferation in general and in the Middle

East in particular. As long as Gulf security depends on a US presence in the region, Jordan depends on Western aid to fight the Islamic State, and Turkey remains a NATO member, it is highly probable that none of these states will engage in a move that would anger Washington to the point of threatening bilateral relations. In this sense, Saudi Arabia is somewhat *sui generis*. Given the international imprimatur to Iran to enrich uranium on its soil, one cannot rule out the possibility that the kingdom will pursue a similar route in the future, even if this defies US preferences. At this point, none of the region's nations is showing any sign of wanting to compete with Iran's military nuclear program, but several states have already hinted that at least at the technological and scientific level, they have no intention of being left behind.

Beyond the concern about transitioning from civilian to military nuclear projects, there are fears about the safety and security of the facilities under construction. Some of the reactors planned are intended to be built near earthquake-prone zones. It may also be that considerations of budgets and prestige will translate into cutting corners on appropriate security and safety measures so as to save money and advance the projects as rapidly as possible, a concern raised about the construction of the first nuclear power station in Turkey. Furthermore, given past terrorist attacks on energy infrastructures in the region, such as the Sinai gas pipeline and the oil lines coming out of Iraq, there is a concern that similar groups will try to damage developing nuclear facilities. As was seen in the case of the el-Dabaa reactor in Egypt, local unrest can also result in damage to nuclear installations.

Notes

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PART II

Nato and Missile Defense

NATO's Nuclear Deterrence in the Post-Ukraine Era

Azriel Bermant

49

Unwilling to Succeed: The Czech Position on US Missile Defense – Between Strategy and Public Political Debate

Irena Kalhousová

63

NATO's Nuclear Deterrence in the Post-Ukraine Era

Azriel Bermant

This paper examines NATO's nuclear deterrence policy in the wake of Moscow's use of force in Ukraine and its annexation of Crimea. NATO's ability to conduct an effective deterrence strategy has faced serious challenges as a result of both divisions over the role of tactical nuclear weapons and incoherence regarding policy toward Ukraine. This essay argues that Russia's violation of the Intermediate Range Nuclear Forces (INF) Treaty, the increased emphasis it has placed on its strategic nuclear weapons, and its direct challenges to the resolve of the Alliance all demand that NATO be ready to respond forcefully to protect member states that are most vulnerable to attack, with particular emphasis on Poland and the Baltic states. However, amid a renewed rise in tensions between NATO and Russia over Ukraine, missile defense, and the threat to the Baltic states, the Alliance must also do its utmost to avoid an unintended nuclear escalation. In view of NATO's conventional superiority over Russia, the Alliance can afford to minimize the role of its nuclear weapons. The NATO summit in the summer of 2016 is an opportunity for the Alliance to declare its resolve to protect vulnerable member states while also placing a greater emphasis on conventional resources in its deterrence doctrine.

NATO's Identity Crisis

Nuclear deterrence, which during the Cold War was a fundamental component of NATO's defense policy and strategy, was developed almost exclusively to deal with the Soviet threat. With the end of the Cold War and the collapse of the Soviet Union in 1991, serious questions arose regarding NATO's continued relevance in the wake of the declining threat from Russia. Although

since then the Alliance has had a significant role to play in conflicts outside of the European arena, such as in Afghanistan, with the diminishing threat from Moscow, question marks continued over its relevance well into the new millennium.¹ In tandem, the role of nuclear weapons was gradually downgraded, and NATO's conventional capabilities were deemed sufficient for meeting new threats from adversaries such as Serbia, Iraq, and Libya.²

NATO's missile defense system is a manifestation of the Alliance's efforts to deter and confront a threat emanating from the Middle East rather than Russia, and indeed, the capabilities of the missile defense system are too limited to pose a threat to Russia. In recent years, as NATO has focused on the new threats from the Middle East, concern has risen over the proliferation of ballistic missiles and weapons of mass destruction from the region. Notwithstanding the signing of the Joint Comprehensive Plan of Action (JCPOA) between the world powers and Iran in July 2015, there remains the potential threat of Iran acquiring a military nuclear capability. A nuclear Iran would pose an immediate threat to NATO as it borders Turkey, an Alliance member, and over time it will pose a danger to other NATO countries as well. The United States has taken the lead within NATO to establish a missile defense system to protect Alliance troops and populations from the growing missile threat from Iran. In May 2016, the US anti-missile shield site in Romania became operational, forming a significant part of the NATO missile defense system in Europe.

NATO views missile defense as a component that complements deterrence. Indeed, it can also be viewed as a form of deterrence (deterrence by denial) since it seeks to dissuade a potential adversary by demonstrating that its actions will be denied the benefits originally sought. A potential aggressor would have to take into account the strong probability that the retaliatory capacity of the targeted country would survive intact as a result of the anti-missile shield. Deterrence by denial must be backed up by the threat of punishment to be effective. The deployment of a missile defense system can significantly challenge an adversary's plans, while also devaluing the potential destructive impact of the aggressor's ballistic missiles.

The NATO anti-missile shield is intended to deal with threats outside the Euro-Atlantic area, and cannot realistically address the concerns of vulnerable Alliance member states regarding the Russian threat.³ In parallel, however, NATO has sought to open a new chapter in relations with Russia. The NATO Lisbon summit of November 2010 expressed its commitment

to establish “a lasting and inclusive peace” with Russia in the Euro-Atlantic region, and seek a “true strategic partnership between NATO and Russia.” The Alliance also announced its intention of pursuing cooperation with Moscow in the field of missile defense. The Strategic Concept that was adopted at the NATO Lisbon summit included an acknowledgment that the end of the Cold War had brought about a changed security environment with a significant reduction in the number of nuclear weapons deployed in Europe and a decreasing dependence on nuclear weapons in NATO strategy. It stated that NATO would work for further reductions in nuclear weapons, and would “seek a safer world for all andcreate the conditions for a world without nuclear weapons.”⁴ The Lisbon summit declaration matched the efforts of the Obama administration to open a new chapter in US-Russia relations. The improvement in ties between the United States and Russia culminated in the April 8, 2010 signing of the New START Treaty, which provided that the number of nuclear warheads of the two countries would be reduced to 1,550 and deployed strategic launchers would be reduced to 700 over a ten year period.⁵

However, the same Strategic Concept of November 2010 that acknowledged a reduced reliance on nuclear weapons also affirmed that “deterrence, based on an appropriate mix of nuclear and conventional capabilities, remained a core element of [NATO’s] overall strategy.” The document declared that the strategic nuclear forces of the United States, as well as the independent nuclear capabilities of Britain and France, constitute the “supreme guarantee” of NATO security. The Strategic Concept underscored that NATO will remain a nuclear alliance as long as nuclear weapons exist.⁶ This was reaffirmed at the NATO summit in Wales in September 2014.⁷ Furthermore, NATO’s Deterrence and Defence Posture Review (DDPR), which was unveiled at the May 2012 NATO summit in Chicago, declared that nuclear weapons were in fact “a core component of NATO’s overall capabilities for deterrence and defense,” together with its conventional and missile defense assets. The DDPR review claimed that NATO’s nuclear force posture satisfied the criteria “for an effective deterrence and defence posture.”⁸ Between 2010 and 2012, it was clear that in spite of differences within the Alliance over tactical nuclear weapons, nuclear deterrence remained an integral part of NATO’s strategic policy.

A Renewed Focus on Deterring Russia

Six years after the Lisbon summit and the New START treaty, the new reality of East-West tensions over Ukraine has resulted in a reassessment of the Alliance's nuclear deterrence policy. Since Russia's use of force in Ukraine and its annexation of Crimea in 2014, NATO has focused anew on its deterrence policy vis-à-vis Moscow.

Concerns over the threat from Russia have arisen as a result of several factors, including a significant increase in close military encounters between Russian and Western military forces following the annexation of Crimea. NATO conducted some 400 interceptions over Europe during 2014, with a similar number of interceptions during 2015, as NATO officials disclosed that the Alliance conducted over 250 scrambles against Russian aircraft in Europe during this time. Many of these interceptions were conducted over the Baltic region,⁹ with some 160 flights made by NATO Baltic Air Policing fighters to intercept Russian aircraft.¹⁰ It appears that Russia has directed its military forces and security agencies to act in a more aggressive manner to test the preparedness of NATO defense systems and the extent of cooperation among Alliance member states.¹¹ In May 2016, three British fighter jets intercepted three Russian military transport aircraft heading for the Baltic states.¹² A month earlier, two Russian warplanes flew simulated attack passes by an American guided missile destroyer in the Baltic Sea.¹³ In January 2015, Britain summoned the Russian ambassador to explain why two Russian Bear planes were flying without transponders over the English Channel dangerously close to civilian aircraft, which could have caused a serious aviation disaster.¹⁴ Turkey's downing of a Russian warplane in November 2015, in the context of the war in Syria, only serves to highlight the growing risks of a severe disaster and the dangerous implications that could follow such a development.

NATO deterrence policy is also directly affected by Russia's violations of the INF Treaty and the modernization of its strategic nuclear forces. Obama administration officials have held high level discussions with their Russian counterparts over Moscow's flight testing of a ground launched cruise missile. In a joint hearing before the House Foreign Affairs and Armed Services Committees in December 2014, Rose E. Gottemoeller, US Under Secretary of Arms Control and International Security, stated that the United States would be exploring military options to ensure that Russia would not obtain "a significant military advantage" from its failure to adhere to the

INF Treaty, and that continued Russian violations would demand measures by the United States and its allies to safeguard their collective security.¹⁵ NATO's concern is that Russia could launch a cruise missile attack on Europe, raising fears of a surprise attack on strategic targets with little or no notice.¹⁶ The violation further undermines the trust between NATO and Russia, and strengthens the need for an effective deterrence policy.

In 2016, NATO's nuclear deterrence policy is also shaped by Russia's modernization of its strategic nuclear forces. The upgrading of Russia's nuclear arsenal will involve a significant increase in the number of warheads loaded on submarines and new delivery systems for ballistic missiles. Russia has also begun production of a new class of submarines intended specifically for the delivery of cruise missiles. Indeed, Russian President Vladimir Putin has placed an increasing emphasis on nuclear weapons as a guarantor of Moscow's international prestige. In a speech in the summer of 2014 devoted largely to the Ukraine crisis, Putin referred explicitly to Russia's nuclear weapons and declared that other countries "should understand it's best not to mess with us."¹⁷ In September and November 2014, Russia successfully tested a submarine-launched Bulava intercontinental ballistic missile intended for carrying nuclear warheads.¹⁸ For its part, the United States is planning an extensive modernization of its own nuclear forces. Over the next thirty years, Washington plans to spend approximately \$1 trillion to maintain and modernize its existing nuclear arsenal, including the acquisition of replacement systems and the upgrading of nuclear bombs and warheads.¹⁹

Disagreements over the Role of Nuclear Weapons

There is a risk that NATO's nuclear deterrence policy could be compromised by disagreements within the Alliance. More specifically, there have been divisions over the role of the nuclear arsenal, with a number of NATO countries in Western Europe (particularly Germany) that have argued in the past for the return of tactical nuclear weapons to the United States, out of a belief that they have provided little military value.²⁰ With a resurgent Russia on NATO's borders, such divisions are likely to recede. The argument for the removal of tactical nuclear weapons has been challenged by the Russian military action in Ukraine and the annexation of Crimea, with other NATO members taking the view that American B-61 nuclear warheads are required to reassure vulnerable member states. The United States has been upgrading the B-61 nuclear bomb in five European NATO member states.²¹

It is almost certain that US tactical nuclear weapons will remain in Europe for the foreseeable future. According to Nikolai Sokov and Miles Pomper, the debate over the withdrawal of tactical US nuclear weapons from Europe is now effectively over.²²

At the same time, there is a growing debate over the effectiveness of tactical nuclear weapons in deterring Russia. Some experts question whether NATO's nuclear deterrence doctrine is fit for the purpose in the wake of the failure to stop Russia in Ukraine. For example, Barry Blechman and Russell Rumbaugh maintain that NATO's conventional superiority over Russia dictates that the Alliance's tactical nuclear weapons have little value. In their view, NATO would be better off investing its resources in effective conventional and strategic nuclear forces. While a withdrawal of US tactical weapons from Europe might well be interpreted as a weakening of the American commitment to NATO, the Russian invasion of Ukraine has demonstrated that US tactical nuclear weapons have no deterrent impact and are ultimately "a particularly ineffective and wasteful way of keeping the continent safe."²³ There is also an argument that US tactical nuclear weapons in Europe are "useless" since they have not provided reassurance to the Baltic states most threatened by Russia.²⁴

Against this, Lukasz Kulesa has maintained that the argument over the "uselessness" of tactical nuclear weapons misses the point, since no fundamental interests are at stake in Ukraine. NATO was never threatened to the degree that it became necessary to activate nuclear forces. The threat to use nuclear weapons can be considered only in exceptional cases where the fundamental interests of the relevant countries are at stake.²⁵

A separate question is whether NATO enlargement has created a difficulty with regard to the shaping of an effective deterrence policy. At the NATO summit in Bucharest in 2008, the Bush administration supported admission of Georgia and Ukraine to the Alliance, but France and Germany were opposed, believing that this would anger Russia. A compromise was eventually reached whereby the Alliance held back from initiating the process of admitting Georgia and Ukraine to NATO but recognized their aspirations to membership.²⁶ NATO appears to be in a bind: having encouraged Ukrainian aspirations for membership, there is a sense that it must express some readiness to support Ukraine against Russian-backed attacks. However, since Ukraine is not a member of the Alliance, and the attacks on the east of the country do not directly endanger member countries, there is no fundamental interest at stake

and therefore less incentive to come to the aid of Ukraine. Indeed, President Obama acknowledged in early 2015 that the option of military support for Ukraine is limited, since it is not a NATO country.²⁷ There is likewise an argument that NATO was mistaken in encouraging Ukraine to join the Alliance, since the country has always possessed unique significance for Russia.²⁸ Rather than issuing half-hearted commitments to defend Ukraine, which only undermine a cohesive deterrence policy, the Alliance should focus on deterring potential attacks on member states.

In the wake of the crisis in Ukraine, there have been calls for the deployment of nuclear weapons in Eastern Europe as a means to strengthen deterrence.²⁹ However, such a move would be deeply provocative for Moscow, and may further escalate tensions between NATO and Russia while serving only to strengthen divisions between the western and eastern parts of NATO.³⁰

NATO's nuclear deterrence policy faces unique challenges in the wake of Moscow's declared readiness to resort to nuclear attacks to "deescalate" a conventional war. Britain's Defense Minister Michael Fallon voiced concern in February 2015 that Russia may have lowered the threshold for its use of nuclear weapons, and stated that Britain needed to update its own nuclear deterrent in response.³¹ In March 2015, the Russian ambassador to Denmark warned Copenhagen that Danish warships would become targets for Russian nuclear missiles if it participated in the NATO missile defense system.³² According to the amended Russian military doctrine approved in December 2014, "The Russian Federation reserves the right to use nuclear weapons in response to the use of nuclear and other types of weapons of mass destruction against it and/or its allies, and also in the event of aggression against the Russian Federation involving the use of conventional weapons when the very existence of the state is under threat."³³ The language here suggests that Russia now does not rule out a "first use" of its nuclear weapons.

Vladimir Dvorkin argues that the language of the military doctrine is little different from the American, British, and French nuclear strategic principles of the Cold War, which permitted a first nuclear strike because the Soviet Union held a qualitative conventional edge over the West. Today, with the Western advantage in conventional forces, Dvorkin maintains that the Russian right to a first strike is understandable, but he concludes that in spite of the Ukraine crisis and the military escalation, it is premature to suggest that the conditions dictating the Russian use of nuclear weapons have changed. Nevertheless, Russia has certainly placed a stronger emphasis

on the development of its strategic nuclear forces to maintain the balance with the United States.³⁴

In 2009, well before the Ukraine crisis, Russian conducted an extensive exercise that included a staged invasion of the Baltic states and a simulated nuclear attack on Poland. In 2013, Russia carried out simulated attacks on Sweden, Poland, and Lithuania, and also threatened to carry out preemptive operations against ballistic missile defense facilities in Romania and Poland.³⁵ Since the beginning of the Ukraine crisis, both NATO and Russia have expanded the magnitude and range of their war games.³⁶ Where there was once a relatively low likelihood of a military confrontation with Moscow, the dangers of an unintended escalation have certainly increased.

Managing Nuclear Deterrence Policy in a Climate of Rising Tensions

The question remains, how does NATO maintain a policy of nuclear deterrence in response to Russia's nuclear posture and its threats to Alliance members, without creating a dangerous nuclear escalation? On the one hand, NATO's nuclear deterrence doctrine must make explicit that a nuclear strike against a member of the Alliance will be met with a nuclear counterstrike.³⁷ Failure to do so would expose vulnerable NATO members such as Poland and the Baltic states to attack and could seriously damage the principle of collective security underpinning the Alliance. On the other hand, the present conflict with Russia over Ukraine presents grave dangers of unintended escalation. As Alexei Arbatov has pointed out, "In global politics, particularly when it comes to nuclear issues, words are deeds." After the Cuban missile crisis in 1962, both the Soviet and American leaders exercised great caution in their rhetoric on nuclear weapons. In some ways, the current situation may be worse than the Cold War, since previous generations of leaders gained extensive experience in dealing with crises relating to the threat of nuclear war and were able to avoid a nuclear cataclysm. The present generation of leaders and policymakers does not have the benefits of this experience, and instead must start from scratch.³⁸

Russia's former Foreign Minister Igor Ivanov has suggested that "in the absence of political dialogue, with mutual mistrust reaching historical highs, the probability of unintended accidents, including those involving nuclear weapons, is getting more and more real."³⁹ Ivanov is in good company. In March 2011, well before the Ukraine crisis erupted, a number of distinguished

former US statesmen, Kissinger, Nunn, Perry, and Shultz, argued that nuclear deterrence today is increasingly dangerous and ineffective, bringing with it a greater risk of an unintentional use of nuclear weapons. They contended that the United States, NATO, and Russia would be more secure if they avoid threatening nuclear postures and reduce their dependence on tactical nuclear weapons. The United States needs to work with its NATO allies in developing an extended deterrence strategy based less on a nuclear capability and more on conventional means.⁴⁰

Indeed, it can be argued that to some extent this is already happening. In the spring of 2016, NATO drew up plans to deploy four combat battalions of some 1000 troops each in Poland, Estonia, Latvia, and Lithuania, in order to reassure eastern Alliance members and to deter Russia.⁴¹

Kulesa maintains that the United States and its NATO allies were able to deter Russia from escalating the crisis in Ukraine with a focus on extended conventional deterrence, including the deployment of conventional forces in Eastern Europe, fighter aircraft, and reconnaissance flights with naval forces in the Baltic and Black Seas. While “nuclear weapons were employed in the background,” the Alliance countries focused on an increase in conventional forces, avoiding any public reference to the need for a more open nuclear deterrence. However, Kulesa also argues that a removal of US tactical weapons from Europe would not necessarily improve the situation: by investing instead in conventional capabilities, it would become necessary to strengthen conventional deterrence, which would only invite Russia to consolidate the role of its own nuclear deterrent.⁴²

Thus, NATO's nuclear deterrence policy will have to maintain a careful balance between deescalation with Russia over Ukraine, perhaps at the cost of ruling out future Ukrainian membership in the Alliance, and firm NATO resolve that any conventional attack on Alliance member states will be met with overwhelming conventional force. For the foreseeable future, NATO will need to retain its nuclear weapons in order to signal to adversaries that a nuclear strike against Alliance members will be met with devastating retaliation. At a time of growing concern among NATO members on Russia's periphery, a withdrawal of tactical battlefield nuclear weapons could damage Alliance cohesion and be viewed as a sign of weakness. Nevertheless, in view of NATO's conventional superiority over Russia and the grave dangers of unintended nuclear escalation, the role of nuclear weapons in its deterrence role should be deemphasized.

Conclusion

NATO's Deterrence and Defence Posture Review of 2012 has made it clear that nuclear weapons are at the core of the Alliance deterrence policy alongside its conventional forces and missile defense assets, even if there appeared to be signs in previous years that NATO was downgrading the role of its nuclear weapons. In the years following the collapse of the Soviet Union, NATO diverted its attention to the twin threats of the proliferation of ballistic missiles and weapons of mass destruction from Iran and other countries outside the Euro-Atlantic area. NATO's missile defense system was established with this threat in mind. In confronting threats from revisionist states outside the Euro-Atlantic area, NATO's deterrence strategy can be summed up as deterrence by denial reinforced by punishment.

At the same time, NATO sought to open a new chapter in its relations with Russia, illustrated by the overtures made to Moscow at the Lisbon summit in November 2010. These efforts to develop a new era of cooperation with Moscow were ruptured in 2014 in the wake of the Ukraine crisis. Yet the increased tensions between NATO and Russia are not limited to the Ukraine issue. US claims regarding Russia's violation of the INF Treaty and Moscow's modernization of its strategic nuclear arsenal have resulted in a growing climate of mistrust. This tension has been aggravated by the military encounters between Russian and NATO military forces since the beginning of the Ukraine crisis and Putin's belligerent rhetoric over nuclear weapons.

NATO faces the challenge of managing an effective nuclear deterrence policy that provides reassurance to vulnerable Alliance member states in Russia's "near abroad" while also avoiding an unintended escalation. De-escalating the tensions with Russia could involve NATO ruling out future Ukrainian membership of the Alliance. At the same time, in the present climate of mistrust, NATO can ill afford to withdraw its tactical nuclear weapons. Nevertheless, as long as there is no direct threat to Alliance members, NATO should place an emphasis on extended conventional deterrence as the means to deter threats to vulnerable member states.

The NATO summit in Warsaw, Poland, scheduled for July 8-9, 2016, provides a clear opportunity for the Alliance to affirm its resolve to protect states that are under threat while also placing a greater emphasis on its conventional resources in its deterrence doctrine.

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Unwilling to Succeed: The Czech Position on US Missile Defense – Between Strategy and Public Political Debate

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Background

After the fall of Communism in 1989, one of the main goals of Czechoslovak, and later Czech, foreign policy, was to become a member of Western security, economic, and political structures. It was not long after the Velvet Revolution that the Czechs rejected “neutrality” and began to strive for NATO membership. This pro-Atlantic position was not only a strategic choice, but also a natural reaction to forty years of living under the Soviet sphere of influence. In light of this historical experience, it was hoped that the United States, rather than West European countries, would provide security guarantees not only to the Czech Republic, but to the whole Central and Eastern Europe region. This aspiration culminated in 1999 when the Czech Republic, together with Hungary and Poland, joined NATO.

In 2006, the US announced a plan to deploy ballistic missile defense interceptors in Europe as part of the George W. Bush administration’s policy for advancing missile defense. In 2007, the Czech Republic and Poland were invited to participate in this plan by deploying US military infrastructure on their territory; ten interceptors would be deployed in Poland and a missile tracking radar in the Czech Republic. The interceptors were to be two-stage versions of the three-stage GBIs, and the radar an X-band radar. The European site of the ballistic missile defense would be part of a system that was intended to defend both the US and parts of Europe from potential future Iranian long-range ballistic missiles.

The participation of the Czech Republic in the US Missile Defense System (MDS) was seen by the proponents of the project as an opportunity

to send a clear signal that the Czech Republic was now fully integrated into the Western political sphere. Moreover, it would convey that the country was shifting from the role of a passive consumer of the security guarantees to that of an actively involved actor that also provides security to others. The Atlanticists saw the MDS as a further step toward strengthening the alliance with the US. They believed that the presence of American military infrastructure on Czech territory would upgrade the role of the Czech Republic as an important strategic asset for the US and thus strengthen the security guarantee provided by the United States. The presence of the US army in the Czech Republic and Poland would also, in their opinion, contribute to the fairer distribution of US military assets over Europe, which did not happen after the enlargement of NATO in 1999 and 2004, and serve as an ultimate security guarantee against Russia. In addition, they saw the presence of a hi-tech project in the Czech Republic as a promising opportunity for Czech scientists and entrepreneurs.

The talks about Czech participation in the MDS, however, took place in a rather different political atmosphere, both in the Czech Republic and internationally, than the atmosphere when the Czechs negotiated their membership in NATO. Their participation was discussed on two levels: the technical and, subsequently, the political. The first technical consultations started in 2002 under the government led by the center-left Social Democratic Party.¹ In September 2002, Minister of Defense Jaroslav Tvrdík visited Washington and confirmed his readiness to facilitate negotiations concerning the deployment of the US anti-missile defense program on Czech soil.² For the next four years, negotiations continued behind closed doors. As they were handled as mainly technical and diplomatic issues, any political, public, or expert-level debate was almost entirely missing. This situation was, however, about to change.

Czech parliamentary elections in June 2006 resulted in a total political stalemate. Both the left and center-left camp and the center and center-right camp won 100 seats in the Parliament. The center-right Civic Democratic Party won the highest number of seats and thus earned the mandate to form a government. It built a coalition together with the Christian Democrats and the Greens. Yet in order to obtain parliamentary approval, it needed the support of at least one member of either the Social Democratic Party or the Communist Party. Finally, on January 19, 2007, two members of the Social Democrats abstained, thus allowing the coalition to win the vote of

confidence needed to form the government. This vote caused an uproar among the Social Democrats, who accused the coalition of bribing their members. It was on the very same date of this critical vote that the US officially asked the Czech Republic to participate in the MDS by hosting the radar base on its territory, and thus, at this most divisive moment, the MDS became part of the Czech domestic political debate.

The Civic Democrats, with a strong group of Atlanticists, supported Czech participation. The Christian Democrats were also in favor, although some of its members in the Parliament did not hide their pacifistic inclinations and reserve regarding the MDS. It was, however, mainly the Green Party that contributed to the lack of unity in the coalition. Most of the ministers from the Green Party were not against the MDS but promoted its multilateralization. The Green Party leadership and the majority of members, on the other hand, rejected the project entirely. The Social Democrats used the MDS to position themselves against the government and, in particular, their main rival, the Civic Democrats. The Communists, for their part, opposed any kind of US presence on Czech territory.

With negotiations having been long kept out of public view and without any debate in the Parliament, Czech citizens, as well as the broader community of experts, lacked information. Debate, therefore, should have been encouraged. Since the Czech Republic entered NATO, foreign policy topics appeared only marginally in the domestic debate. The MDS thus provided an opportunity to discuss a geopolitical project in which the Czech Republic might play a role. The public could have been exposed to a debate that concerned national interest, foreign policy strategy, and the Czech contribution to international security. However, rather than being conducted in a politically constructive style, the debate took place in a highly politicized and divisive atmosphere. Due to domestic political instability, the arguments in favor or against Czech involvement were presented in a very simplistic, ideological, and often even demagogic manner.

This article argues that the key actors on both the domestic and international levels contributed to the atmosphere in which it became largely impossible to reach a national consensus and broad acceptance of the MDS. The aim is not to analyze the MDS project, but rather to examine the Czech domestic political debate and the impact of external players, mainly the US and Russia, on both the Czech political leadership and the public.

Public Opinion

The MDS was publicly discussed only when it became part of a domestic political struggle during 2006 and 2007. According to a public opinion poll from July 2006, 83 percent of Czechs were against participation in the MDS.³ The main reason given was the fear of exposing the Czech Republic to the potential revenge of terrorists. Among respondents, the number of those against the MDS increased with age (the largest group of opponents being aged fifty and above). Having experienced the twenty-year presence of Soviet troops, they did not view US military presence as a security guarantee, but rather as a limit to their national sovereignty. A year later, when it became clear that the Czechs would be asked to host not rockets but a radar base, a survey run by the American Opinion Research Corporation showed that a majority of Czechs were still not convinced: about 51 percent objected to a radar base on Czech soil and 57 percent rejected the idea that the radar would strengthen the security of their country.⁴

Two researchers from the Institute of International Relations in Prague, Hynek and Střítecký, analyzed the main arguments of those who were against the radar.⁵ They found that opponents considered the US a foreign power looking to impose its will over the Czech Republic. They also discarded the idea of a common enemy and blamed the US for spreading fear by talking about “paranoiac theories about the Iranian threat.” Furthermore, arguments were advanced that the US and the Czech Republic do not share the same values and are not part of the same alliance, and therefore need not necessarily be protected under the same umbrella.

Various polls repeatedly showed a majority complaining about the lack of information. Those who were better informed tended to be more supportive. Therefore, in March 2007, the Czech government created the position of a special representative, whose task was to conduct negotiations on the radar base and to develop and coordinate a comprehensive public communications strategy. This position was highly problematic from the very outset. First, it was not clear what kind of a mandate this representative had. The parliamentary opposition criticized the government for sending the special representative instead of talking directly to the mayors of the cities and villages close to the intended radar base.⁶ Second, the position of special representative was given to Tomáš Klvaňa, a rather controversial figure known to the public as a lobbyist for the multinational British American Tobacco, a post he kept even while serving as the special representative. As one Czech diplomat

mentioned, it was rather counterproductive when Klvaňa, wearing a tailor-made suit and driving a luxury car, came to negotiate with mayors in the economically struggling region where the US radar base was to be built.

And indeed, the government did not succeed in convincing the representatives of these regions. During 2008, representatives of both Western Bohemia and Central Bohemia voted against hosting the US radar base unless it was approved in a referendum.⁷ They were supported mainly by the Social Democratic and Communist regional representatives. Even though these decisions were only declarative and bore no legal weight, they expressed general reluctance toward the radar, which was reflected in another public survey at the end of 2008 showing that most Czechs did not agree with hosting the radar base on Czech soil. In this survey, two thirds of the respondents were against and 28 percent were in favor; 71 percent were in favor of a referendum.⁸ Most of those against the radar were Social Democrat and Communist voters.

The Czech government, efforts notwithstanding, clearly did not succeed in convincing the majority of Czechs. As observed by Hynek and Střítecký, the American idea of the MDS was communicated to Czech governmental representatives who internalized it and subsequently presented it as a national interest. Yet, the MDS never became a national interest in a true sense. The merging between governmental interest and public interest never took place; rather they collided.⁹

The Role of the Czech Government

In March 2007, the Czech government officially entered into negotiations with the US on the deployment of an American X-Band radar base in the Czech Republic. The Czech government adopted the American *raison d'être* for building an anti-missile defense system in Europe. In June 2007, the US Missile Defense Agency published a document called "Proposed U.S. Missile Defense Assets in Europe." This document defined the main threats (rogue states, mainly North Korea and Iran, and ballistic missile proliferation); detailed the benefits of ballistic missile defense for Europe (enhanced collective security of the NATO Alliance, strengthening of transatlantic unity, and technology sharing); and stressed that the prospective US missile defense assets deployed in Europe were not directed at Russia but aimed to provide defensive coverage against threats coming from the Middle East.¹⁰ The Czech government did not prepare tailor-made documents that would

reflect the Czech national interest in participating in the MDS; rather, it embraced the American arguments.

This lack of any Czech-made strategic document proved to be problematic. The Czech public, as shown in various public opinion surveys, never became convinced that the Czech Republic should be an active participant in the MDS. For many Czechs, apparently, the MDS symbolized a US projection of power rather than a defensive tool against threats emanating from the Middle East. Similarly, the debate among Czech political leaders was more about the pros and cons of a US presence on Czech soil than the impact of the MDS on global security.

Missing Domestic Political Consensus

Another major reason for the lack of public support for the MDS was the lack of political consensus. The government itself was weakened by the ambiguous position of the Green Party. For the first time in their history, the Czech Greens won seats in the 2006 parliamentary elections. Due to the results that divided the number of parliamentary seats equally between the left and the right, the Greens' negotiating position was very strong. With only six members in the Parliament, they managed to obtain four ministerial seats in the government. However, their lack of political experience and ideological ambivalence became apparent during the debate about the MDS.

In general, the Greens opposed the foreign policy of George W. Bush and specifically its perceived unilateral character. The MDS should not, they argued, be a bilateral project between the Czech Republic and the US, but rather should become part of the NATO anti-missile defense system. When the government adopted this perspective and started to actively promote "NATO-ization" of the MDS, the Greens put other demands on the table.

The government approved the main treaty on the building of a US radar base on Czech soil in May 2008 (one of the ministers from the Green Party abstained, three voted in favor). The treaty was then subject to approval (by a simple majority) by the Parliament. The Green Party demanded postponement of the vote until after the US presidential elections in November 2008, arguing that more time was needed for an internal debate. They maintained that a vote should take place only after the missile defense agenda of the new administration was clear.¹¹ Some Green MPs, with strong support from within the party leadership, kept rejecting the MDS outright.¹² In order to be ratified by the Parliament, all coalition parties needed to vote in favor

of the treaty, with one additional vote needed from the opposition. The Social Democrats, however, became hesitant. For years, negotiations had mainly taken place behind the closed doors of the Ministry of Defense and the Ministry of Foreign Affairs. The public was thus largely unaware that it was governments led by the Social Democrats that first negotiated with the US about the MDS. Therefore, the Social Democrats, out of concern for any political loss caused by proving inconsistent, used the radar for political bargaining with the coalition. They placed a set of demands as the precondition for their support, including the integration of the MDS into NATO structures and a national referendum about Czech participation in the project.

For the government negotiators, however, the situation was complicated even further by the unclear position of Jiří Paroubek, chairman of the Social Democrats. According to one diplomat talking confidentially with the American negotiators, while Paroubek was quite supportive of Czech participation in the MDS, when addressing the Czech public, he took a very populist approach. In 2008, with the culmination of the debate about the radar, Paroubek warned Social Democrat MPs against voting in favor if they wanted to hold onto their positions on the subsequent party list.¹³ He also promised to support the protest activities organized by the NGO *Ne zakládám* (No to the Bases), the most vocal and visible organization against the radar.¹⁴

The domestic political confrontation both within the government and between the government and the opposition made a serious, non-ideological debate impossible. This lack of domestic consensus thus weakened the government's mandate to negotiate both the technical and political aspects of the treaty with the US government.

Multilateralization

The US MDS was originally planned as a bilateral project between the US and the Czech Republic and the US and Poland, respectively. Yet as the negotiations gained momentum, the demand for multilateralization grew in the Czech Republic.¹⁵ Hence, in late 2007, the Czech government started to promote the so-called “NATO-ization” of the MDS. Poland, on the other hand, continued to support the bilateral nature of the project.

Most European NATO members did not oppose the MDS in principle. However, since NATO had been working on its own anti-missile project (Active Layered Theatre Ballistic Missile Defense [ALTBMD]), there was

concern that by supporting the MDS in Europe the Bush administration was looking to bypass collective agreements. The US administration did, in fact, emphasize its desire to keep its European MDS infrastructure outside of the NATO command structure.¹⁶ Some European NATO members were also upset about being excluded from the negotiations about the project, which affected more than just the Czech Republic and Poland. One of the main concerns was that the MDS would not defend all European NATO members (particularly Southeast European countries), which would breach the principle of collective security. Opponents also raised the question of the potential impact of radioactive debris over Europe should a nuclear missile be shot down by the system.

In addition, the EU was disturbed that it had not been consulted on US plans that would affect European security and relations with third countries, mainly Russia.¹⁷ However, the lack of an EU collective strategy regarding the anti-ballistic program and the negative approach of some EU members to the MDS in general contributed to skepticism about the ability of the EU to play any constructive role in this project. Nonetheless, by not consulting with the EU, the Czech Republic missed the opportunity to maintain a stronger position on the question of the European security agenda. It is evident that neither the Czech nor the American negotiators paid enough attention to other relevant actors, mainly other NATO members and the EU, and consequently, when the Czech government, with US backing, aimed for the “NATO-ization” of the MDS, it encountered resistance from some members.

Czech and American negotiators hoped to gather support for the MDS at the NATO summit in Bucharest in 2008. Czech diplomats admitted that the negotiations at the summit were far from easy. Germany and Slovakia, both neighboring countries, were particularly opposed to the deployment of US missile defense assets in Europe out of concern for the Russian reaction. The NATO members finally agreed to recognize the contribution of European-based US missile defense assets to the protection of NATO allies from long range ballistic missiles.¹⁸ The final summit declaration also stated that NATO would explore ways to make the MDS part of any future NATO-wide missile defense architecture, but fell short of the actual incorporation of the MDS. The project was now, however, officially recognized as beneficial to European security.

The Role of the United States

The plan to deploy US missile defense capability in Europe, which was promoted by the administration of George W. Bush – whose disdain for international institutions and whose “war on terror” agenda had become rather unpopular – faced growing resentment in Europe. While this antipathy was stronger among the political left in Western Europe, it also had some impact on Czech center-left parties as well as the general public. The bilateral nature of the negotiations, which for some time excluded third countries, only strengthened the feeling that the Bush administration was paying no attention to collective agreements and was thus undermining multilateral forums.

The Americans, for their part, had expected negotiations about the technical parameters of the MDS and were therefore caught unprepared when the topic became politicized both on the domestic level in the Czech Republic as well as in NATO and the EU. Nor were the bilateral negotiations between the Czech Republic and the US free from diplomatic faux pas. While visiting Prague in October 2007, Minister of Defense Robert Gates accidentally leaked information about negotiations with the Russians, to whom the Americans had apparently offered the option of placing Russian observers at the US radar site in the Czech Republic. To Czechs, who still had vivid memories of the Soviet occupation of Czechoslovakia, the fact that Americans had negotiated a Russian presence on Czech soil without informing them was unacceptable. The step was strongly condemned even by MDS proponents in the Czech Republic.¹⁹

As the negotiations entered their final stage, it became clear that even in the US the project did not have clear support from Congress. In both the House and the Senate there were doubts concerning the realistic capabilities of the MDS in its current stage. Moreover, the Democrats criticized the Bush administration for insufficient coordination with NATO.²⁰ This lack of Congressional support manifested itself in budget cuts. For the fiscal year 2009, the Bush administration requested \$712 million for financing the European part of the missile defense, but the House Armed Services Committee agreed to provide only \$314 million for the proposed sites in the Czech Republic and Poland. The Committee expressed its doubts concerning the effectiveness of the project based on the results of program testing, showed concern about the lack of ratified agreements with the Czech Republic and Poland, and raised doubts, based on a new analysis by

the American intelligence agencies, concerning the estimated pace of the Iranian long range missile program.²¹

As Bush's second presidential term drew to an end, the future of the MDS became unclear. During his presidential campaign, Senator Obama supported the ballistic missile defenses, provided they were operationally effective.²² This position contributed to feelings of uncertainty about the determination of the Democratic presidential candidate, if elected, to continue with the MDS in Europe. Some Czech politicians started to doubt whether it was worth risking their political capital by supporting an unpopular project that might be dropped by the new administration. The ratification process was therefore slowed in order to assess the impact of the presidential election results on the MDS.

The Role of Russia

The Russian reaction to the MDS in Central Europe reflected its trauma from the years of the Cold War. It also proved that after years in decline, Russia was once again determined to promote its interest in its European neighborhood. The NATO presence at its western border epitomized to the Russians both a threat and a reminder of its own weakness. The two rounds of NATO enlargement, in 1999 and 2004, took place when Russian power was on the wane and presented no challenge to the West. The announcement of the MDS in Europe came at the very same time that President Putin decided to revive the status of Russia as a country whose interests must be taken into consideration.

Russia applied various tools in order to prevent the deployment of the US anti-missile system in the Czech Republic and Poland. On the diplomatic scene, President Putin did not refrain from using very harsh language. At the Munich Security Conference in February 2007, he claimed that the MDS in Europe would lead to "an inevitable arms race";²³ on another occasion he compared US plans in Europe to the Cuban missile crisis of 1962.²⁴ Furthermore, Russia threatened to transfer medium range ballistic missiles to the Russian enclave of Kaliningrad, and even indicated that these new weapons might target the US sites in the Czech Republic and Poland.²⁵

On a strategic level, Russia did not accept the argument that the MDS was aimed at the Iranian threat. Instead, Russia argued that the reason for placing the radar in the Czech Republic was to monitor Russian military sites, and the interceptors planned for Poland were to serve as deterrents

against Russia's missile arsenal.²⁶ By being so vehemently opposed to the MDS in Europe, Putin hoped, and partially succeeded, to fuel discord among NATO and EU members. Fear of the Russian reaction and of the possible deployment of ballistic missiles in Kaliningrad contributed to the cautious approach of some toward the US project.²⁷

It was in the domain of public diplomacy where Russia managed to gain substantial influence over the public discourse in the Czech Republic. As mentioned above, American negotiators, together with their Czech counterparts, considered Czech participation in the MDS a technical issue and were not well prepared for the public discussion. Russia, on the other hand, recognized all too well the potential of strong public disagreement over the radar on the position of the Czech government. This was the first time since the Cold War that Russia became so heavily involved in the Czech domestic debate.²⁸

Russian involvement manifested itself on various levels. First, by threatening to use force against the facility itself, they managed to raise fear among some Czechs.²⁹ Second, the Russian argument that the MDS in Europe was actually aimed against Russia was adopted by many Czech opponents of the project. Some pro-radar Czech politicians argued along similar lines and maintained that Russian threats proved that US presence on Czech soil was actually the best guarantee against Russian expansionism. In this way, the Russian tactic of rerouting the debate from the Czech contribution to NATO security to the old Cold War East-West discourse proved successful. Third, Russia helped to galvanize public opinion against the radar. The most prominent initiative against the radar was the organization *Ne základnám* (No to the Bases). Founded in June 2006, this initiative managed to unite a range of heterogeneous groups that opposed the radar. Noam Chomsky, the prominent linguist from MIT, and some well-known Czech intellectuals joined the initiative, an umbrella organization of sixty different organizations including Young Socialists, Young Greens, Union of Muslim Students in the Czech Republic, and the International Peace Movement.³⁰

Ne základnám became active in all regions of the Czech Republic. It organized public rallies, distributed leaflets, advertised on billboards, and collected 150,000 signatures on a petition demanding a nationwide referendum. The initiative argued that rather than serve American interests, the Czech Republic, with its history of Soviet occupations, should now remain neutral and serve as a bridge between the West and Russia. It became the most visible

operation dealing with the issue of radar and one of the most successful public initiatives in the Czech Republic to date.³¹ Its massive campaign, especially the billboards, required strong financial backing. Russian involvement has not, as yet, been officially proved, but Czech TV did report on the Russian secret service's financial contribution to the campaign, basing their claims on an annual report of the military intelligence and counter-intelligence service of the Czech Republic.³² While this was never officially confirmed, Russian clandestine involvement became a widely accepted unofficial fact.

Supporters of the radar did not initiate a similar campaign. The governmental effort was promoted by their special representative, Klvaňa. American tactics were more discrete. For example, Czech MPs were taken to the Marshall Islands where they could visit the radar planned for the Czech radar base. Yet, this was no match for the well-organized and visible campaign against the radar. Moreover, due to the nature of *Ne základnám*, it was easy get the impression that whereas the MDS was only supported by part of the Czech political representation, the anti-campaign was a truly grassroots movement.

The Obama Administration

On assuming office, President Obama inherited from his predecessor an array of “unfinished” foreign policy business. It was clear to Obama that in order to deal with the conflict in Afghanistan and Iraq, solve the Iranian nuclear program issue, redefine the war on terror, and promote nonproliferation, he would need the support of both European allies as well as Russia. The announcement of the “reset” policy with Russia raised concern among the CEE countries, especially due to growing speculation that President Obama had offered to Russian President Medvedev to stop the deployment of the missile defense program in Europe on condition that Russia cooperate with the US in its efforts to halt Iran's nuclear program.³³ While the US administration denied the existence of such a quid pro quo, it became clear from his communication with Medvedev that for Obama, the MDS in Europe was not about strengthening US presence in the CEE but was part of a broader US foreign policy strategy that was about to be redefined. Multilateralism, rather than unilateral or bilateral actions, would be the preferred strategy.

Obama's plans concerning the MDS in Europe were not, however, immediately apparent. In the first half of 2009, the Czech Republic held the Presidency of the Council of the EU, and Obama planned to visit the

EU-US summit in Prague. Czech negotiators hoped that by arranging a meeting between Obama and Paroubek, the head of the opposition Social Democratic Party, the opposition leader would change his mind and support the treaty concerning the building of the radar base.³⁴ Yet at this very sensitive moment, domestic political instability manifested itself once again. Only a few days before Obama's visit to Prague, there was a vote of no confidence in the Czech Parliament. The fragile coalition lost this motion after four of its MPs (two from the Civic Democratic Party and two former members of the Green Party) voted against the government. The fall of the government during the EU presidency, shortly before the EU-US summit hosted by Prague, and at a time when the Czechs were negotiating with the new US administration, significantly weakened the Czech position and raised doubts about the predictability and seriousness of the Czech political leadership in general.

However, it was Obama and his administration that had the final say about the future of the MDS in Europe. After the Quadrennial Defense Review in summer 2009, the Obama administration decided to cancel the planned European third site of ballistic missile defense. The Czech and Polish Prime Ministers were informed of this decision in the middle of the night by a call from Obama. The timing of the announcement was most unfortunate; the news went public on the anniversary of the 1939 Soviet invasion of Poland, which marked the beginning of World War II.

In light of his previous doubts about the technical feasibility and political benefit of the MDS, Obama's decision was not totally unexpected. Opponents of the project, both in the Czech Republic and in Europe, welcomed the announcement, yet the Atlanticists felt bitter and disappointed. They interpreted Obama's decision as an attempt to appease Russia in order to achieve other foreign policy goals at the expense of the CEE allies. On the one hand, they understood that after two decades of relatively successful transformation, the region was now democratic and stable and thus required no more close attention from the US. On the other hand, the fear of Russia had not abated, and the unequal deployment of NATO assets between the old and new members raised doubts about NATO's ability to protect its eastern border. This concern was expressed by twenty-two CEE intellectuals and former politicians who wrote a letter to Obama in July 2009. In this letter, which was signed by Václav Havel, Lech Walesa, and Aleksander Kwasniewski, among others, the US was urged to reconnect with the CEE around a "new and

forward-looking agenda.”³⁵ Again, the disappointment among the Atlanticists showed that in their eyes the MDS symbolized US security guarantees to the region rather than a defensive tool aimed at protecting the Euro-Atlantic region against rogue states.

The Bush administration’s third site plan was replaced by the European Phased Adaptive Approach (EPAA), which would protect Europe against Iranian short and medium range ballistic missiles. The infrastructure was to be deployed in four phases in Poland and Romania. The Czech Republic was offered a minor role in the EPAA but refused. Nonetheless, the Czech Republic did support the project, which was adopted by the NATO missile defense strategy, in the hope that it would strengthen US involvement in Central and Eastern Europe. NATO invited Russian participation, but the negotiations proved that Russia preferred bilateral negotiations with the US rather than with NATO. The question today remains, to what extent the US is willing to implement the EPAA. In March 2013, it was already announced that the last phase of the EPAA would be dropped. This caused concern among the CEE that, as with the Bush project, the EPAA would be sacrificed in order to gain Russian support for other US foreign policy issues.

Conclusion

The MDS project was a clear demonstration of the current foreign policy positions of its main actors. The Czech Republic, which evolved in the post-Communist era fairly successfully in economic and political terms, lacks clear, long term foreign policy strategy. Instead of discussing the MDS within the context of its strategic significance, it was subordinated to domestic political struggles. Whereas in the early years of transformation mainstream political parties agreed that Czech membership in NATO and the EU was a strategic interest of the country, the MDS project and deeper cooperation with the US was never similarly accepted and remained a divisive topic. The MDS also demonstrated that for the US, the CEE countries, being stable and prosperous countries, no longer represented a “special” case. Rather, the MDS was assessed by the Obama administration mainly from the position of technical feasibility and strategic significance and not as an initiative to strengthen the stability and security of the region. Moreover, the MDS project reminded the Czechs, as well as the international community, that the role of Russia was changing and that Moscow was once again a player, actively involved in its neighborhood either directly or through its proxies.

Five years after the cancellation of the missile defense third site plan, relations between the US and the CEE are not exactly flourishing. The Atlanticists, in particular, feel disillusioned. They criticize Obama for lack of leadership and blame his administration for placating Russia at the expense of the CEE allies. The events in Crimea and Ukraine validated their concerns that Obama's "reset" policy toward Russia was naive. The proponents of strong transatlantic relations hope that the latest events in Eastern Europe will serve as a wake-up call to those who believe that the East European post-1991 border status quo is a given. Russian revisionism and a Western lack of will to stand against it contribute to the feelings of insecurity in the post-Communist countries. Completion of the EPAA could be a way to reassure the CEE about US involvement. It would, in addition, send a clear message to Russia that both US and NATO defense strategies are unfazed by Russian blackmail tactics.

Notes

In preparation of this article, the author conducted the following interviews:

Name	Position	Date
Petr Chaloupecký	Deputy Head of Delegation, Czech Permanent Delegation of the CZ to NATO	April 11, 2014
Zbyněk Pavlačík	CEO of Jagello 2000 (Association for Euro-Atlantic Cooperation)	May 5, 2014
Tomáš Pojar	First Deputy, Ministry of Foreign Affairs (2006-10)	April 17, 2014

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- 10 American Missile Defense Agency, "Proposed US Missile Defense Assets in Europe," 2007, <https://www.fas.org/irp/threat/missile/bmd-europe.pdf>.
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- 12 MP Věra Jakubková, *Ibid*.
- 13 "Paroubek Threatens Members of the SocDem Party who Support the Radar," *Ihned.cz*, March 5, 2008, <http://zpravy.ihned.cz/c1-23111370-paroubek-chysta-bic-na-straniky-kteri-podpori-radar>.
- 14 *Ibid*.
- 15 Ivan Gabal, Oldřich Černý, and Jiří Schneider, "Did the Czech Republic Manage the Negotiations about the Anti-Missile Defense between 2006-2009?" Ivan Gabal Analysis & Consulting and Prague Security Studies Institute, February 24, 2010, p. 4. http://www.gac.cz/USerfiles/File/nase_prace_vystupy/GAC_GCS_Radar.pdf?langSEO=documents&parentSEO=nase_prace_vystupy&midSEO=GAC_GCS_Radar.pdf.
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- community provided a useful argument for Czech opponents to the project. Steven A. Hildreth and Carl Ek, "Long-Range Ballistic Missile Defense in Europe," Congressional Research Service, September 23, 2009, p. 24.
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 - 24 "Putin Compares US Shield to Cuba," *BBC*, October 26, 2007, <http://news.bbc.co.uk/2/hi/7064428.stm>.
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 - 26 Hildreth and Ek, "Long-Range Ballistic Missile Defense in Europe," p. 24.
 - 27 In 2008 French President Sarkozy suggested that Russia and the US should discuss the foundation of future pan-European security within the OSCE and added: "Please, no more talk about deployment of missile and anti-missile systems." Sarkozy may have pleased the Russians but the statement was totally rejected by both the Czechs and Poles. Moreover, Polish Prime Minister Tusk reminded Sarkozy that it was a bilateral project between the US and Poland and that France would be well advised to keep its opinion to itself. See "France 'Overstepped Mandate' on Missile Shield Moratorium," *EU Observer*, November 17, 2009, <http://euobserver.com/defence/27115>.
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PART III

Israel's Strategic Dilemmas

Israeli Deterrence in the 21st Century

Avner Golov

83

Israel and Strategic Stability in the Middle East

Shlomo Brom

99

From Nuclear Disarmament to "Strategic Stability": Implications for Israel of an Emerging Global Debate

Emily B. Landau

115

Israeli Deterrence in the 21st Century

Avner Golov

Since the establishment of the state, deterrence has played a key role in Israel's security doctrine. Military deterrence was a primary component of the security doctrine, as reflected in Ze'ev Jabotinsky's 1923 essay "The Iron Wall: We and the Arabs"; the security principles espoused by David Ben-Gurion; the report of the commission formed in 2005 and headed by Dan Meridor to update these principles; and the IDF strategy document published in August 2015.¹ In recent years, deterrence was a declared key goal of military operations undertaken by Israel against the violent sub-state organizations Hezbollah and Hamas.²

In the West, especially the United States, the concept of deterrence has evolved in recent years as part of a debate intended to adapt global security challenges and needs to a post-Cold War world. This essay examines several major changes to the concept of deterrence and their relevance to the Israeli discourse on deterrence. It underscores the need for an extensive debate about the nature of Israel's deterrence and its adaptation to the new and emerging security challenges in a changing international arena. The essay begins with an overview of the concept of deterrence and its role in Israel's security doctrine. It then discusses some of the prominent changes in the global post-Cold War world order and three new trends that have emerged in deterrence thinking. The essay concludes by offering three conclusions about the concept of deterrence in Israel's security doctrine that may be derived from those changes.

The Concept of Deterrence

Strategically, deterrence is a policy of using threats to prevent an enemy from carrying out some action.³ Unlike strategies of coercion designed to

stop an action from being carried out or to cause the enemy to carry out certain actions, the purpose of deterrence is to prevent a future action that the enemy is liable to carry out. The history of deterrence tactics goes back many years, but it was only during the Cold War that systematic thinking was applied to use of deterrence as a leading strategy to manage relations between the two nuclear superpowers – the United States and the Soviet Union. Over the years, deterrence thinking developed into theory and policy, and included an attempt to attribute the principles of deterrence to relations between enemies that had no military nuclear capabilities. The most prominent example is the current focus on sub-conventional deterrence toward violent non-state actors.⁴ Overall, intellectual efforts have labored to adapt the theory of deterrence to the security challenges facing a nation in the 21st century, and have likewise contributed to the debate about deterrence in the context of Israel's security doctrine.

Indeed, deterrence has long been a central component in Israel's security doctrine, which has traditionally rested on three pillars: deterrence, early warning, and decision. Over the years, the pillar of defense was added, and suggestions were made regarding other components.⁵ As part of Israel's security doctrine, deterrence was meant to prevent Israel's enemies from attacking the state or harming its citizens, or at least to extend the periods of calm between confrontations. Israeli intelligence was charged with warning the nation of an expected failure of Israel's deterrence and allowing the security forces to foil an attack and renew deterrence.

Deterrence in the International Arena: From a Bipolar to a Multipolar World

During the Cold War, the world was clearly divided into two main camps – the Soviet bloc and the US-led bloc. In such a world, there were few doubts about the orientation of most nations and, for that matter, about their hierarchy: there were superpowers, powers, and “rank and file” states. Intra-state and intra-regional tensions were subordinate to the dominance of the rivalry between the superpowers. A well-known example in this context was the war between North Korea, aligned with the Soviet bloc, and South Korea, supported by the United States. The conventional wars between Israel and its neighbors also bore an aspect of the superpower conflict. By contrast, in the current world order, most nations have experienced a significant process of integration. On the one hand, this phenomenon encourages greater

cooperation between rivals, such as the United States and China. On the other hand, it arouses antagonism between allies as the result of conflicts of interest. The rivalry between the United States and Saudi Arabia in the energy market is a contemporary example of this duality.

Prof. Joseph Nye once claimed that these changes are leading to a new era in the international system in which “networks supplement, if not fully replace, hierarchical power.”⁶ In other words, instead of the clear world order of the Cold War, the current world order is more dynamic and less fixed or defined. A similar description of an emerging multipolar world order was also given by US President Barack Obama, who said that the world now has many powers with varying degrees of might but no superpowers.⁷ Nye maintained that in the emerging world order, enmity at the global level was actually the most stable, thanks to the existence of nuclear weapons. The regional and intra-nation systems that are no longer subordinated to the dynamics between the global powers can be expected to be a source of instability because of the growing strength of ethnic, national, and religious identities.⁸

A parallel phenomenon is the rising status and power of non-state actors.⁹ If during the Cold War the “real game” was between states, over the last 15 years the power of the international conglomerates and organizations – whether violent or not – has increased. These began to command power on various levels and in geographical areas where states failed to institute order and rule. These organizations rode the wave of globalism, which allowed modernization and the accelerated rate of technological development to cross borders on the one hand, and allowed the failures of failing states to provide services to their citizens on the other. Non-state actors are characterized by markedly different organizational structures, decision making processes, and sets of considerations than those characterizing states. For example, the Islamic State and al-Qaeda in particular are not bureaucratic entities weighed down by formal sociopolitical agreements, and their strategy places no emphasis – as does the strategy of states – on civil channels of action (at least at this stage of their struggle to expand the areas under their influence and control). Therefore, confronting them, and especially their military forces, requires an adjustment of traditional principles of deterrence.

The emergent multipolar world that includes the rise of non-state players affects the relevance of the bipolar deterrence model in which one nation wants to deter another, which in turn seeks to deter the first. Currently,

messages of deterrence are simultaneously transmitted to several states and non-state actors that are presumably very different from one another. This situation presents some unique challenges to the concept of deterrence. While to some extent some of these challenges existed also in the past, the rapid impact of the new conditions could tilt the scales. Therefore, researchers of the new wave in deterrence thinking are proposing the concept of “tailored deterrence.” According to this approach, it is necessary to tailor one’s deterrence uniquely to each and every enemy rather than transmit global messages or principles. The IDF’s strategy document has also adopted this approach.¹⁰

The new approach to deterrence has triggered a reassessment of the old principles of deterrence. Below are three thought processes that have developed in the context of this reassessment that are important to the Israeli discussion on confronting the Middle East reality and its many challenges related to deterrence: the potential nuclear threat from Iran, the conventional military threat from Syria and Egypt, the semi-conventional threat from Hezbollah and Hamas, and the hidden threat from small terrorist groups affiliated with the Islamic State in Syria and the Sinai Peninsula.

A Change in the Nature of Extended Deterrence

The model of extended deterrence describes a situation in which a power seeks to defend an ally by deterring that ally’s enemy.¹¹ This model was very common during the Cold War when the United States, for example, sought to deter the Soviet Union from attacking its European allies. In this model of deterrence, the key challenge to the defending (detering) side was to convince the other side that the message of deterrence was credible, i.e., that it was prepared to act on its threat. First, the defender must persuade the attacker (the side one is trying to deter) that the defender is prepared for an escalation in their relations, even if the attacker has a third party nation in its sights (the defender’s ally). Second, the defender has to provide reliable guarantees to its ally so that the latter will trust it and not escalate its own relations with the attacker. This was always a complex challenge, but in a world clearly divided into blocs with great internal convergences of interest it was far simpler. In a multipolar world in which there is no division into neat blocs, the convergence of interests among allies is much smaller.

Conflicts of interest intensify in light of instability in the regional system. In this reality, conflicts of interest between a global power with broad

interests and its ally whose range of interests is narrower and focused mostly on regional considerations are more clearly visible. For example, this kind of tension emerged between Saudi Arabia and the United States when they tried to align their positions on the Syrian civil war. The Saudis' desire to act against Bashar Assad and his Shiite allies (Iran and Hezbollah) encountered US resistance, which stemmed primarily from concern about engaging in a third war against a Muslim country (after Afghanistan and Iraq). Various scholars of deterrence feel that in the next few years the key challenge to US extended deterrence will be to provide guarantees that will persuade US allies that Washington is willing to take action against threats that do not necessarily affect US security only.¹² In their view, in the current internal politics of the United States, the US public cannot be expected to support use of force that exceeds objectives clearly and directly linked to critical US interests. Therefore, it is difficult to see how the US administration can provide sufficient bilateral guarantees to its allies, which is why more voices are calling for US guarantees supporting regional security arrangements.¹³ In a proposed solution, the United States would support strengthening its worldwide allies' capabilities to defend themselves. Direct US intervention would be required only in cases of severe or extreme threats to US interests as well. It seems that this model is highly relevant to the Middle East. Recent years have witnessed the first US efforts (which so far have borne no fruit) to establish such a partnership with the Sunni Gulf states.¹⁴ This model also matches the Obama administration's goal to "pivot" toward southeast Asia.¹⁵ The American campaign against the Islamic State as part of a wide international coalition is further evidence of the American approach.

Expanding the Deterrence Toolbox

Another challenge to the strategy of deterrence lies in the defender's capabilities. The concept of deterrence as it developed during the Cold War referred primarily to the military balance of power between the defender and the attacker, with nuclear weapons playing a central role in that equation.¹⁶ The defending side was required to possess sufficient capabilities to cause the attacker unbearable damage, so that the attacker would be convinced it would be against its own best interests to engage in the forbidden action. This element was called deterrence by punishment. In a world divided into two blocs with virtually no interaction between them, the major means of punishment was military action. The threat of using military force is

tremendously effective psychologically, as it allows one to beat the enemy without ever having to defeat it on the battlefield.¹⁷ But in the current world order, enemy nations maintain relationships in many non-military areas. For example, the EU's largest partner for commercial trade is Russia.¹⁸ The United States and China are another example of rivals maintaining close commercial relations with one another.¹⁹

Some assert that in a multipolar world it is less common to use military levers of pressure and that they are less effective.²⁰ Interestingly, the combination of non-military pressure – economic sanctions, political isolation, and so on – is precisely what could generate a coalition of cooperative member states, thereby increasing the pressure on the attacker and becoming an effective persuasive tool. The use of threats is likely to create the desired psychological effect and prevent the attacker from carrying out its plan only in unique and extreme circumstances in which the threat of the use of force is perceived as credible. At present, according to this approach, in many cases a systemic strategy could be a more effective means of persuasion than the effort of a single state to affect another state directly. Military tools are ineffective in attaining this goal. Some contend that the United States is already incorporating non-military components into its strategy of deterrence, for example, in face of the threat from Iran's nuclear program and Russian policy in Eastern Europe, and that these components should be given greater weight.²¹

These conclusions indicate an adjustment in US strategy that could be no less relevant to states that are not global powers. Such states have a limited capacity for projecting a credible threat on their own. They are therefore required to develop soft power, i.e., economic and political leverage that creates cooperation, affects the dynamics of a regional system, and promotes their national interests. Based on this approach, clinging to the old, narrow concept of deterrence may be able to create a credible threat in a very limited number of cases but could preclude other opportunities of creating deterrence.

The Connection between Deterrence and Defense

A third challenge to the strategy of deterrence also concerns the defender's capabilities, especially the connection between the strategies of deterrence and defense. The understanding that the challenges of deterrence are more complex in the current international reality increases the demand for multipurpose,

versatile tools that could serve deterrence but also be capable of foiling an attack in case the deterrence fails. Such tools are more in demand when they bear no offensive characteristics and are aligned with the Western desire to reduce violence to resolve crises. The rise in demand for active defensive capabilities²² is the most relevant example for deterrence: active defensive capabilities are non-aggressive by nature, reduce the enemy's expected profit from an attack, and thus support deterrent efforts while being capable of foiling an attack if the enemy nonetheless decides to strike. The tool most in demand in this field is anti-missile defense. Such systems provide a response to a wide gamut of threats, from the scenario of a nuclear missile strike to the threat of conventional rocket and missile attacks, whether perpetrated by states or terrorist organizations.

The link between deterrence and defensive systems, or the concept of "deterrence by denial," is far from obvious, and indeed, contradicts the US understanding of the relationship between deterrence and defense as formulated during the Cold War. For at least three decades, US policy opposed the development of significant active defenses lest these destabilize the superpower balance, which was based on the shared ability to cause the other unbearable damage.²³ Robert McNamara, the architect of the MAD (mutual assured destruction) principle, thought it was impossible to attain hermetic defenses against the Soviet nuclear threat, meaning that the only effective way to preserve the balance of power and prevent escalation and nuclear war was each power's ability to destroy the other power's assets.

In the 1980s, President Ronald Reagan changed this approach by announcing the Star Wars initiative, which involved massive development of defensive capabilities against the Soviet threat. Reagan claimed that although the defenses would not be hermetic they would be able to cope with a significant portion of Soviet missiles, and that the new defensive capabilities would support deterrence when incorporated with US offensive capabilities – both first strike (in advance of a Soviet attack to damage Soviet capabilities) and second strike (as a response to a Soviet attack and to cause unbearable damage) capabilities.

The approach linking deterrence to defense is also based on the fact that a preference for defensive over offensive capabilities reduces the risk for escalation, because it provides a better response to the key security dilemma: the attempt of Nation A to improve its security is liable to damage the security of Nation B, whereupon Nation B will act to improve its security,

thereby damaging the security of Nation A. In this situation, both nations will experience insecurity and enter into an arms race. One way to deal with the dilemma is by developing defensive capabilities that will improve the security of Nation A without damaging the security of Nation B. Thus, according to the proponents of this school of thought, defense could support deterrence and help stabilize relations between enemy states. In this approach, the dilemma is more relevant now than in the past because of the multipolar nature of the international arena.

Israel's Strategy of Deterrence

The IDF strategy document spells out the army's doctrine on deterrence:

Deterrence must be **specific and adapted to each enemy**; it must be based on an ongoing analysis of the enemy's characteristics, considerations, capabilities, identity, and decision making process. For every enemy, deterrence must be –

- a. Without a particular context – **general and cumulative over time**, in order to preserve the current situation and formulate “rules of the game” desirable to Israel;
- b. In the context of a crisis – **specific and focused** in order to force the enemy to act or avoid taking action in order to stop deterioration and prevent a war.²⁴

The document also spells out the components of Israel's deterrence:

A credible threat of extreme offensive actions that will take a very heavy toll in the case of an attack. This component is based on –

- a. **Force buildup**, some of which is clear to the enemy and demonstrates the ability and willingness to damage it.
- b. **Psychological acts** expressing our willingness to take risks.
- c. **Limited offensive actions** to signal our willingness to “deviate from the rules of the game” and take risks.

Force buildup that demonstrates the enemy's hopelessness (e.g., defensive systems)

Foiling and impeding capabilities.²⁵

The three changes in thinking about deterrence presented above are the context for reexamining Israel's strategy of deterrence and the role it plays in Israel's security doctrine.

Extended Deterrence: The US Umbrella

The IDF strategy document indicates that the strategic relationship between Israel and the United States plays an important double role in Israeli deterrence: close cooperation with Washington increases Israel's scope for political and operational maneuvering when responding to aggression against it, and it improves Israel's operational capabilities to harm its enemies by means of enhanced force buildup as well as by means of the threat of US intervention on its behalf. However, recent years have seen changes in the nature of US security guarantees to Middle East nations, from bilateral to regional. Clearly, in this reality, the application of the model of strategic relations with the United States is very problematic for Israel, for two reasons.

One, as long as there is no drastic improvement in official relations between Israel and the region's nations, there is very little chance of a regional deterrence system with Israel. Two, any US attempt to support the existence of a regional defense system is liable to erode the principle of Israel's qualitative military edge (QME). According to the QME standard, the United States is committed to maintain Israel's technological arms advantage and strengthen Israel's deterrence. Furthermore, in a multipolar world, there are increased chances for conflicts of interest between the United States as a superpower and Israel, which is liable to damage the political space Israel needs to manifest its capabilities in real time. The US desire to enlist Iran in the battle against the Islamic State is an example of friction between the US interest in stabilizing the regional system and the Israeli interest to keep Iran, a regional enemy, from growing even stronger than it already is. Reliance on the old model of deterrence without considering the limitations of the emergent reality in the Middle East is liable to bring Israeli disagreements with the United States into sharper relief and lead to mutual disappointments in real time when Israel's deterrence is put to the test.

This challenge requires the establishment of Israeli and US analysts to map the challenges of deterrence liable to develop in the region and clarify principles for the nations' cooperation while defining the areas of agreement and disagreement. As for the disagreements: it may be that for these Israel will have to generate its own military and political solutions,

e.g., a clarification of the various issues that may point to Israel's need to develop an independent military response to a possible Iranian breakout to nuclear weapons if there is US opposition to a military move of this sort.

Expanding the Toolbox: Soft Regional Leverage

As would be expected, the IDF's strategy document speaks mainly of military leverage as the dominant component in Israel's deterrence strategy. Even outside of the military, Israeli thinking focuses its policy debate on the military level. This approach is quite distinct from the global trend, which is to promote the expansion of the deterrence toolbox and stress the ability to affect regional systems with non-military tools.

While military capabilities must indeed remain the foundation for Israel's deterrence, at the same time Israel should develop soft tools that will allow it to affect regional dynamics, especially intelligence capabilities to identify the potential for ad hoc alliances in order to deter a common enemy, and political capabilities to leverage these opportunities in practice. Cooperation with Saudi Arabia against the Iranian nuclear program is an example of such policy. It is clear that at present, conditions are not yet ripe for public cooperation between Israel and the nations of the region, and secret cooperation against common enemies is the more realistic option (notwithstanding that even if a covert joint venture allows certain achievements, the aspect of secrecy detracts from its deterrent nature).

Another channel of action could be indirect action designed to prompt other actors to deter Israel's enemy. For example, it may be possible to pressure Egypt or Jordan to act against Palestinian terrorism from the Sinai Peninsula or the West Bank, even if this is not a direct Egyptian or Jordanian interest. Israel's leveraging of its new water and energy resources could prove to be effective in this context. New energy discoveries could, for instance, provide for the basic needs of Israel's neighbors for available energy sources at attractive prices. This channel should be explored not only for its economic viability but also for its potential as soft power and capacity for promoting Israel's national interests. Plans would have to include an analysis of various regional escalation scenarios and the limits of this sort of leverage under extreme circumstances.

In order to enhance its soft power, Israel would have to establish channels of communication with its neighbors. Seclusion reduces one's potential for influence in general, and for influence in the regional reality in particular.

Therefore, Israel would do well to establish effective official channels of communication with its neighbors for use in crises. For nations with which it is impossible to arrive at sufficient official communication, one could exploit social media options for communicating with the relevant public. Even if limited in its effectiveness, this channel could be critical in a crisis, because it could allow Israel to clarify its positions and intentions and understand the positions and inclinations of the other players in the system. So, for example, it would be possible to take a steep public toll of Hamas in the case of escalation in Gaza or from Hezbollah in a similar scenario on the northern border.

The Connection between Deterrence and Active Defense

Israel has great potential for leading the global discourse on the link between deterrence and active defense. The IDF strategy explicitly links Israel's defensive capabilities with its deterrent capabilities.²⁶ Israel leads the R&D of defense systems against rockets, ballistic missiles, and anti-tank missiles. Cooperation with the United States in the field of active defense has made it possible for Israel to build a triple-layered anti-missile defense system – from rockets to intercontinental missiles armed with nonconventional warheads. Israel has even started to sell these systems to other nations.

Linking deterrence to defense and the tremendous investment in developing technologies for active defense systems is not above controversy. Some argue that this investment is liable to erode Israel's offensive capabilities, which are more important than its deterrence.²⁷ However, this line of thought is not aligned with current thinking about deterrence, particularly concerning non-nuclear threats. Accordingly, enhancing the components of deterrence by denial may play a positive role in stabilizing the regional system and increasing Israel's sense of security without damaging its neighbors' sense of security. It could also reduce any incentive to engage in a regional arms race. Moreover, the double-sided nature of the system makes it possible to strengthen deterrent capabilities without damaging the ability to foil attacks in case deterrence fails. So, for example, defensive systems reduce damage and save civilian lives. At the same time, they reduce the pressure exerted on decision makers to respond during escalations and extend the time available to the political leadership to decide on the nature of Israel's response to attack, thereby enhancing the nation's ability to prevent uncontrolled escalation.

This is of pivotal importance when considering deterring terrorist organizations, which represent a tougher challenge for deterrence than nations because they are free of state-informed political and strategic considerations. For example, during the round of fighting with Hamas in the summer of 2014, the Iron Dome system gave Israel's decision makers breathing room to try to prevent escalation on the southern front as Hamas's political leadership sought a ceasefire (whereas the military leadership sought to escalate the situation) without sacrificing preparations for a military response to defend Israeli civilians against Hamas's rocket and missile attacks.

The key criticism of Israel's policy in the summer of 2014 was that in practice, reliance on defensive capabilities damaged the nation's deterrence and provided Hamas with time to dig in and fortify itself against Israel's counterattacks, thereby reducing Israel's ability to damage the organization's strategic assets. Indeed, the objective of deterrence is to buy time. The political-security establishment in Israel ought to promote a conceptual line of thinking about the connection between deterrence and defense in order to maximize defensive capabilities in the field of deterrence against different threats in a changing environment. The IDF strategy document, which links deterrence to defense, must serve as the foundation for systematic thinking that relates to the various threats Israel might have to face in years to come: the relatively established organizations, such as Hezbollah and Hamas; the less established organizations, such as the Islamic State and various jihadist factions; and different types of states – fully sovereign, such as Iran; states with vast hinterlands, such as Egypt; or failing states, such as Syria. It is necessary to consider the limits of the connection between defense and deterrence with regard to each one of these scenarios and the ways to maximize that connection.

Conclusion

This essay has examined changes in Western thought about the strategy of deterrence and shown that in recent years, the US strategy of deterrence, as consolidated during the Cold War, has lost some of its urgency, mostly because it no longer applies to the security challenges that have emerged due to changes to the global system. Three trends in adapting the concept of deterrence to the 21st century have already matured in US policy: changing the nature of the US commitment as part of the model of extended deterrence,

expanding the concept of deterrence to include non-military tools in the strategy, and strengthening the connection between defense and deterrence.

The case of Israel differs from that of the United States. Israel is a regional military power that does not seek to expand its influence on other countries in the Middle East. Therefore, Israel's policy must examine the changes in US thought in light of its own particular needs. This essay has presented three relevant lessons to the efforts to update Israel's security doctrine relative to the new security challenges, and also to the efforts to update the role of deterrence as part of a comprehensive approach to security. The analysis shows the need to reexamine the limits of the US umbrella, and stresses the need to develop soft tools to allow Israel to affect regional dynamics in order to preserve its own interests. Finally, the essay demonstrates that Israel is ahead of the curve when it comes to developing active defensive capabilities. It is necessary to complete the technological development and the related conceptual discourse about the connection between deterrence and defense, given the wide gamut of threats Israel must confront. This connection must retain the balance between the active defense systems and tools of deterrence by punishment at Israel's disposal.

These recommendations, representing only some preliminary thinking about the topic, indicate the need for a broader discussion designed to adapt Israel's strategy of deterrence to the 21st century. A reexamination of the basic assumptions of the strategy of deterrence is critical, because adhering to the old strategy of deterrence risks forfeiting opportunities to preserve deterrent capabilities and prevent future crises.

Notes

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Israel and Strategic Stability in the Middle East

Shlomo Brom

When Thomas Schelling wrote a foreword to a collection of articles on strategic stability published in 2013 by the Strategic Studies Institute and the US Army War College, he briefly described the development of the concept of “strategic stability” during the nuclear era, and added:

Now we are in a different world, a world so much more complex than the world of the East-West Cold War...Now the world is so much changed, so much more complicated, so multivariate, so unpredictable, involving so many nations and cultures and languages in nuclear relationships, many of them asymmetric, that it is even difficult to know how many meanings there are for “strategic stability.”¹

Reading this text, a veteran Middle East observer might say: Welcome to our world of an unpredictable Middle East! Indeed, Israel has faced such a complex environment since its establishment, and its predicament is in many ways the story of the search for strategic stability. This story includes the attempt to avoid surprise attacks through deterrence, followed by the need to deal with the consequences of a failure of deterrence, first in a non-nuclear context, later in the same environment with some limited nuclear elements, and currently, while preparing for the possibility of an era in which Israel will have to achieve strategic stability in a full nuclear context.

The ideas that underpin the concept of strategic stability date as far back as the early 1950s, when both the United States and the Soviet Union began

A previous version of this article was first posted on a closed website managed by the Program on Strategic Stability Evaluation (POSSE) in July 2014. The author would like to acknowledge the generous support of POSSE, sponsored by the Carnegie Corporation of New York.

to build a nuclear arsenal.² The goal was to address the incentive provided by nuclear weapons to initiate a surprise first attack when two nuclear powers face one another. This scenario is not yet relevant to the Middle East, and there is currently a general assumption that only one state in the region, Israel, is a nuclear weapon state. However, the concept of strategic stability was deeply embedded in Israeli strategic thinking since the inception of the State of Israel, albeit in a wider context of the existential threats Israel faced and without the explicit term “strategic stability.” At an early stage of the development of Israel’s national security doctrine there was some thinking that was connected to the nuclear era. Since the late 1970s, when Iraq’s Saddam Hussein launched his nuclear program, Israel was compelled to take seriously the possible proliferation of nuclear weapons in Middle East states, examine the implications of such proliferation, and devise counter strategies, while reconsidering strategic stability. In recent years Iran succeeded in achieving a status of a nuclear threshold state, and this will presumably motivate further thinking on the subject.

Since 1969 Israel has embraced a doctrine of “nuclear ambiguity,” and therefore there is no official public discourse on nuclear subjects other than nuclear proliferation in the Middle East. In striving to understand Israeli thinking on nuclear issues, one can infer that the limited discussion of nuclear subjects in Israeli academia and think tanks reflects the discussion that takes place in the official circles – assuming that such a discussion takes place. This also explains why it is important to examine Israeli thinking on strategic stability in non-nuclear contexts. Moreover, future nuclear strategies and doctrines in Israel will, to a great extent, evolve from previous perceptions and concepts.

The Early Years

Israel’s War of Independence ended in July 1949, and armistice agreements were signed with the neighboring Arab states that participated in the war. Yet while the Arab attempt to destroy the new Jewish state failed, it soon became clear to Israel’s leaders that the Arab world was not prepared to accept this reality. Consequently, the basic assumption was that there would be further attempts against Israel’s very existence, which meant that Israel had to prepare for the next rounds. The person who dominated Israeli strategic thinking during these years was David Ben-Gurion, Israel’s first prime minister. In

the early 1950s he formulated an Israeli security doctrine to deal with this Israeli predicament, and it remained valid in subsequent decades.

In essence, the challenge that this security doctrine addressed was very similar to the challenge that led US thinkers to develop the concept of strategic stability. The main threat was the threat of a surprise attack waged by a coalition of Arab states, whereby the Arab states could optimize their advantages due to the large asymmetries between them and Israel. Israel's small territory, small population, and limited resources implied that it could maintain only a small standing armed force, while the Arab states could keep large standing armies. By initiating a surprise attack with armored and mechanized forces supported by airpower, the Arab armies could overcome the small Israeli standing army and advance throughout the territory of Israel in a very short time. That was the existential threat Israel had to face during these years. Translating the Israeli predicament into terms of modern strategy, the main question was how to achieve strategic stability by deterring the Arab states from launching a surprise attack that would pose an existential threat to Israel.

As could be expected, the debate was about the two main types of deterring threats, denial and punishment. In the superpowers' nuclear context, denial was rejected as a viable strategy because it seemed not feasible, and at a later stage when BMD technologies were ripe, it seemed to be a very expensive option that could incur a destabilizing effect that might hurt strategic stability. In contrast, it was believed that punishment threats of near annihilation of the other party in a second strike would be highly credible. In the Israeli case both kinds of deterrence threats were adopted, because it seemed that there was no way to assure that punishment threats would be credible enough to deter any thought of a surprise attack, mainly because of the wide asymmetries between the two sides. What followed was an understanding that Israel might suffer some surprise attacks, but could not afford to lose significant parts of its territory. The assumption was that every successful denial would contribute to the credibility of Israeli deterrence, create what was termed accumulated deterrence, increase the time between subsequent rounds of war, and eventually convince the Arab states to give up the option of a massive surprise attack aimed at destroying Israel as a way of dealing with the Arab-Israeli conflict.

The doctrine Ben-Gurion formulated was based on the following elements:

- a. Building a large military force based mostly on reserve forces that can be mobilized quickly when needed, as a way of balancing the Arab quantitative edge.
 - b. Retaining a qualitative edge in technology, manpower, training, and command and control, as another way to offset the Arab quantitative edge.
 - c. Building intelligence capabilities that assure early warning of a coming surprise attack, which will enable prompt mobilization of the reserve forces.
 - d. Preparing for a short phase of defensive operations followed by an early transition to counterattack, in order to avoid lengthy operations on Israeli territory and the ensuing destruction, and transferring the fighting as soon as possible to enemy territory.
 - e. Achieving a clear decisive outcome of the war, by destroying the enemy's forces and capturing pieces of its territory, leading to an early ceasefire.
- This strategy was supposed to deny the enemy any achievements and punish it through the damage caused by loss of its forces and loss of territory.

In retrospect the strategy developed by Ben-Gurion was highly successful, but when it was devised there was a high level of uncertainty as to its credibility. Can Israel indeed balance the huge asymmetries between it and its opponents? At a very early stage during the 1950s, the development of the nuclear option was linked with this basic strategy. It seems that the nuclear option was perceived as the ultimate insurance policy, if the strategic doctrine that was chosen failed to prevent the materialization of an existential threat. Based on this thinking, the planning of the Dimona nuclear research center began in the mid 1950s, and construction began in 1959.

Although some elements of the Israeli strategic doctrine failed the test on different occasions, the doctrine as a whole proved highly successful. In 1973, for example, the Israeli intelligence community failed to give prompt early warning of the surprise attack by Egypt and Syria, but the other elements of the doctrine proved valid and allowed Israel to defend itself and end the war with great damage to enemy forces and portions of enemy territory. It may be that the nuclear option also played a role, because it affected the nature of the Arab surprise attack: Egypt and Syria planned a limited attack that would not pose an existential threat to Israel. However, this theory is not generally accepted because these two states had other good reasons to limit the objectives of their attack, stemming from a realistic appreciation of the conventional balance of forces and political reasons.

As a result of the success of the Israeli strategic doctrine, strategic stability was actually achieved after the 1973 war. The Arab governments understood that if the Arab militaries cannot defeat the Israeli Defense Forces even when they succeed in achieving strategic surprise, they should abandon war as a way to settle the Arab-Israeli conflict. This led in the first phase to conclusion of an Egyptian-Israeli peace treaty in 1979. For some time Syrian President Hafez Assad made a feeble – and unsuccessful – attempt to achieve what he defined as strategic parity with Israel, and in any event, it seemed then that the purpose of the Syrian strategic parity was more to establish a kind of mutual balance of terror than to acquire a credible option of attacking Israel.

This period was also characterized by Arab attempts to balance Israel's assumed nuclear capabilities. The inability to develop their own nuclear capabilities led Arab states to efforts to develop other asymmetric responses to the perceived Israeli capabilities; chemical and biological weapons were chosen as “the poor man's nuclear weapons.” Indeed, this concept has some validity. To achieve strategic stability based on credible deterrence, it is not necessary to convince the other party that your retaliation will be even in kind and in scope. It is sufficient to convince the other party that retaliation will inflict intolerable damage on it. With the asymmetries between Israel and the Arab states, it seemed that such a strategic concept could work, and Israel could be deterred by chemical and biological weapons. Egypt was the first to pursue this route and launch chemical and biological weapons programs as well as ballistic missile programs as the preferred delivery means.

One can argue that this strategic stability that was based on asymmetric deterrence stood the test of time. The Middle East was probably the only region of the world in which chemical weapons were used after the World War I, but chemical weapons were never used against a state that was perceived as having weapons of mass destruction in its arsenal. The best example is Egypt, which used chemical weapons in Yemen during the 1962-1967 civil war but did not use these weapons against Israel in the 1967 war, although it sustained a humiliating defeat.

The Era of Nuclear Proliferation

Although there were some indications that the Shah of Iran made the first steps to embark on a nuclear program already in the early 1970s, the Islamic regime that came to power in 1979 after the Khomeini revolution decided

to dismantle the nuclear program. The present era of nuclear proliferation started in earnest when Iraqi ruler Saddam Hussein followed the Shah's ambitions and in 1976 procured from France a nuclear reactor capable of producing plutonium, probably with the intention to use it for production of nuclear weapons. This reactor was destroyed by an Israeli attack in 1981, but its destruction led to an Iraqi decision to start a full blown redundant nuclear program that was aimed at producing nuclear weapons. This program was dismantled following the 1991 Gulf War, but by then Iran already decided to resume its nuclear program, this time with the help of the Pakistani A. Q. Khan network.

The dawn of this era of proliferation demanded Israeli consideration of proper responses. The Israeli decision was to do the most to prolong as much as possible the strategic stability that from its point of view was achieved while perceived as the only nuclear power in the Middle East. Israel was not willing to follow the US example, accept that hostile states in the Middle East become nuclear powers, and search for ways to achieve strategic stability under these new conditions. To be sure, this was a very one-sided outlook, because from the point of view of the Arab actors and Iran it was not a situation of strategic stability but a situation of Israeli military supremacy that allowed Israel to take the military initiative whenever it saw fit. To them, it was the opposite of a stable situation and was probably one of the motivations for nuclear proliferation in the Middle East. This decision in turn led to the development in Israel of the "Begin Doctrine" that outlined the Israeli choice of a strategy of counter-proliferation. Israel will make any effort to prevent further nuclear proliferation in the Middle East, including through military action.

To date the so-called Begin Doctrine has been implemented militarily twice: first in the 1981 air strike that destroyed the Iraqi reactor, Osirak, and second, according to information leaked to the media in the US, in the case of the secret Syrian reactor at al-Kibar (North Syria) that was attacked and destroyed in 2007. There is no general agreement on the efficacy of this doctrine, and the debate focuses mostly on the effects of the Osirak attack. While the proposition that the attack delayed the Iraqi military nuclear program for years is cogent, it did not stop the nuclear program, and perhaps may have strengthened the Iraqi resolve to continue with the program, this time with a more ambitious and redundant program and more investment of resources than Israel could stop by use of force. It was fortuitous that

Saddam Hussein decided to invade Kuwait, which led to the 1991 Gulf War and the forced WMD disarmament of Iraq. Surprisingly there may be some similarities in the Syrian case. It is possible that after the attack that destroyed the reactor the Syrian leadership entertained ideas to restart the nuclear program, albeit in another, less vulnerable form, but the civil war that erupted in Syria in 2011 will delay any realization of this idea for many years. The Syrian regime may also change as a result of this civil war, and a new regime might view the issue differently.

These cases and overall global experience with nuclear proliferation indicate that a nuclear program is stopped when the leadership of the state makes the decision to do so. This cannot be achieved only by military strikes aimed at nuclear installations. However, proponents of the Begin Doctrine could well argue that there is no contradiction, because the delay in the nuclear programs increases the chance of buying time to change the approach of the proliferating state and prompt it to decide to give up its nuclear program.

Along with attempts at nuclear proliferation, the era was characterized by a change in the military balance in the Middle East and the nature of military threats. This change is the result of regional and global political developments as well as changes in the nature of modern conventional war. Following the collapse of the Soviet Union and the end of the bipolar world, the Middle East ceased to be a battleground for superpower rivalry – with ensuing implications for strategic stability. That meant, for example, that a regional state that starts war could not rely on the help of its superpower patron, and if defeated in this war, it could not trust that superpower to help it to recover rapidly from its defeat. The cost of war became higher, making it easier to achieve strategic stability among the states of the region.

In the region itself the pan-Arab idea lost steam and the probability of formation of military alliances against Israel ebbed, lowering the probability of Arab states posing existential threats to the State of Israel. Most Arab governments internalized that the Arab-Israeli conflict can be settled only politically and not through the use of force, that they had to accept Israel as part of the Middle East, and that it was possible to negotiate peace agreements with Israel. Two states have already concluded peace agreements with Israel, and others negotiated peace, so far without results. This has made the Arab world even less of an existential threat to Israel.

At the same time, changes in the nature of modern conventional war increased the military disparity between Israel and its potential Arab rivals. The Revolution in Military Affairs that embeds information dominance, long range precision guided munitions, and computerized command, control, and communications systems with the necessary changes in structure of the fighting forces, operational doctrines, and training gave the IDF a clear edge over its opponents and enabled a quick defeat of large scale armored and mechanized attacks. That also made the classic existential threats Israel had to face since its inception irrelevant, and traditional threats were replaced by asymmetric violent conflicts that erupted in the Middle East. Some of these conflicts are internal conflicts between a government and a non-state actor or among different non-state actors. Some are conflicts between a state and a non-state actor that operates from a neighboring state, for example, between Israel and Hezbollah, which operates from Lebanon. In the case of Israel, these non-state actors do pose a substantive – though not existential – threat because of their ability to disrupt normal life.

Perhaps the concept of strategic stability has less relevance in the case of these conflicts, but in essence, the struggle is indeed a quest for stability. The state engaged in this kind of struggle must assume that as long as there is no political resolution of the conflict that bred the non-state actor's violence, the state will have to live with it, like a chronic disease. Stability is achieved when the symptoms, namely, successful enemy operations, are kept to a tolerable minimum. In this case too, deterrence based on the combined threat of denial and punishment is one of the more effective instruments. The best example is the ability of Israel to keep stability on its border with Lebanon (namely Hezbollah) in recent years.

Looking to the Future

The P5+1 states negotiated an agreement with Iran intended to prevent Iran from acquiring nuclear weapons. If Iran violates the agreement, Israel may operate according to the Begin Doctrine and attack the Iranian nuclear program. This program is vast, redundant, dispersed, and well-defended, and therefore Israel must prepare for a scenario in which Iran becomes a nuclear weapons state either because Israel acknowledged the Begin Doctrine is not implementable in this case or because the attacks on Iran's nuclear program failed to achieve a sufficient delay. In that scenario Israel will have to deal with a nuclear environment that epitomizes Schelling's description – "so

much more complicated, so multivariate, so unpredictable, involving so many nations and cultures and languages in nuclear relationships, many of them asymmetric” – and complicates the challenge of achieving strategic stability.

Dealing with a Number of Nuclear Actors

First, it is assumed that the success of Iran’s nuclear program will prompt other states in the Middle East to follow suit. The first candidate for further nuclear proliferation is Saudi Arabia. The Middle East is now the scene of a multi-dimensional struggle between Iran and Saudi Arabia, with ethnic (Arab vs. Persian), religious (Sunni vs. Shiite), and strategic (competition on hegemony in the Gulf area) roots. It takes place in the Gulf area, Iraq, Syria, Lebanon, and Yemen. As Saudi Arabia perceives Iran under the Islamic regime as an existential threat, it is difficult to assume that Saudi Arabia will be willing to accept a situation of Iranian nuclear monopoly at the Gulf. Saudi Arabia has the financial means and the allies, especially Pakistan, that allow it to have a successful nuclear program. Presumably states such as Turkey and Egypt will follow suit. Keeping a credible deterrence balance in a situation of a number of nuclear actors is not easy, especially when they have respective adversarial relationships. The larger the number of nuclear actors, the greater is the probability of mistakes, miscalculations, and accidents. Likewise, there is greater probability that some of these actors will have only rudimentary command and control of the nuclear weapons without strong mechanisms that can prevent erroneous operation of these weapon systems.

Sending nuclear deterring signals will be very complicated. A signal aimed to deter state A may be misinterpreted wrongly by nuclear weapon state B as a signal that is aimed at it, causing unnecessary tension and possible escalation. Even during the time of the Cold War, of course, the nuclear reality was not purely bipolar because of the appearance of China as an independent nuclear player, but these players played on the global theater and it was easier to identify who threatened whom. The Middle East is much smaller and the states are geographically closer to each other, and therefore these distinctions are much more difficult. When a missile is launched from China it is easy to determine whether it is aimed at the US or at Russia and vice versa. When a missile is launched from a state at the Middle East, it is not always easy to determine its target.

Asymmetric Nuclear Relationships

Israel is perceived as a mature nuclear power, which means that for a relatively long period the nuclear relationships between Israel and the other powers will be asymmetric. There will likewise be other asymmetries. Some states are more vulnerable because of smaller territory and smaller populations concentrated in fewer cities. All these asymmetries may make achieving strategic stability more difficult.

The assumption is that with two asymmetric nuclear powers, both may be tempted to initiate a first strike. The stronger party would wish to make use of its superiority as long as it exists, and the weaker party may think that the only way it can overcome its weakness is by striking first. A perception of more vulnerability of one of the parties may again tempt the other parties to strike first, assuming that they can absorb the counter strike more easily.

All these considerations do not necessarily mean that it is not possible to achieve strategic stability under asymmetric conditions. However, they may imply that more resources should be invested in building a credible second strike capability and convincing the other parties that whatever the asymmetries are, they cannot avoid a second strike that will cause them intolerable harm.

So Many Nations, Cultures, and Languages

Whether deterrence efficacy is based on the cultural context is a recurrent question. Sometimes in the Israeli discourse the question that is raised is: are the leaderships of the region's potential nuclear states rational? The assumption behind this question is that those leaderships are less driven by rational considerations than by religious beliefs, like the idea that initiating a strike that will destroy the infidel Jewish state will bring about the return of the Messiah (the Hidden Imam, according to Shiite Islam) and salvation. If that is the case, then such a leadership might well be willing to pay a very high price to serve a transcendent religious purpose.

The problem becomes even more complex when Israel has to deal with several actors of different cultural backgrounds, from Shiite Muslim Persians to Sunni Muslim Arabs, each with its own brand of religious extremism. The former is willing to make sacrifices to bring back the Hidden Mahdi, while the latter is prepared to make sacrifices to create a global caliphate. Strategic stability from this vantage point looks decidedly unattainable.

Examining the conduct of some of these “extreme” regimes more closely, however, may lead to different conclusions. The decisions that Iran made on different occasions suggest they were perfectly rational and based on Iran’s perceived national interests. When the Nagorno-Karabakh war broke out in 1994 between Christian Armenia and Shiite-Muslim Azerbaijan, Iran sided with Armenia because Azerbaijan, with its irredentist ambitions for areas in the northern part of Iran inhabited by Azeris, was considered a threat. When Russia ruthlessly suppressed the rebellion of the Muslim Chechens, Iran’s relations with Russia were not hurt at all, because the strategic relationship with Russia was perceived by the rulers of the Islamic Republic as very important. Religious considerations were pushed aside and strategic interests were given a clear priority. That of course should bring us to question whether Iran’s rulers would be willing to endanger the survival of the state and the regime for religious purposes, especially when religious commands can often be interpreted in a way that will serve the interests of the moment. Iran is not supporting the Assad regime in the current civil war in Syria out of brotherly love for fellow Shiites (the Alawites of Syria are not exactly Shiites) but because it is its strategic interest, and religion serves only as a tool that can be used to explain its policy and mobilize the masses.

In any case, cultural and religious differences breed distrust among conflicting parties that is difficult to overcome. Disbelief in the rationality of the others may lead, first, to a very strong motivation to prevent acquisition of nuclear weapons by the other parties, even at a high price, and second, to overestimation of the steps that should be taken to establish credible deterrence if attempts at preemption fail.

There is a sense in Israel that because of cultural differences, strategic stability should be examined in cases that are outside the case of the superpowers’ nuclear rivalry. An interesting case is the nuclear race in the Indian peninsula, which poses an opportunity to test different theories of strategic stability. It is, for example, an opportunity to test Kenneth Waltz’s theory of nuclear peace, whereby nuclear weapons induce stability and decrease the chances of crisis escalation. On the one hand, it can be argued that since India and Pakistan acquired nuclear weapons there was no major war between them. On the other hand, there were some serious crises. In one significant crisis in 1990, the situation in Kashmir prompted a limited military confrontation that escalated with the potential to become a major war, and in 1999, immediately after the two states performed nuclear tests,

Pakistani forces invaded a disputed area at Kargil held by India, threatening a major escalation. Eventually there was no escalation and a nuclear war was avoided in both cases, but they indicate that nuclear weapons did not prevent the two sides from taking other military steps that may even be considered as provocative and irresponsible.

Cultural variance and language variance may also cause difficulties of a more technical nature, because signals made by one of the parties can be interpreted in various cultures and languages differently from the original intention of the party that issued the signal. That may cause misunderstandings and miscalculations.

Short Distances

Another element particular to the Middle East reality is the relatively short distances between the states. Short distances mean short reaction times, which makes it impractical to launch the second strike before the enemy missiles launched in the first wave of the surprise strike hit their targets. That implies that all essential parts of the second strike capability should survive the first strike. That includes the delivery systems, the command and control system, and the national decision making apparatus, namely, the element of government that must take these decisions. Perhaps Israel's reported construction of a new deeply buried bunker for the national leadership is connected to the need to assure the survivability of this apparatus.³

Strategic Stability for Israel in this Possible Future Reality

Israel of course prefers to avoid a situation in which it will have to try to establish strategic stability in a Middle East with a number of nuclear weapons states. However, it must consider the possibility that attempts to stop proliferation of nuclear weapons in the Middle East will fail, and therefore, prepare for this eventuality.

Second Strike Capability

In such a reality the most important question will be how to build a credible strike capability that will dissuade nuclear opponents from considering a first strike because they would not succeed in preempting an Israeli second strike. According to media reports, Israel has already started taking concrete steps to build this second strike capability. According to these media reports, the main component of this second strike capability would be diesel electric

powered submarines equipped with nuclear tipped cruise missiles.⁴ These weapon systems were added to the nuclear Jericho missiles Israel is reported to have,⁵ creating a credible nuclear dyad. But usually the first capability that a new nuclear weapon state acquires is the capability to carry nuclear bombs by attack aircraft, and therefore it may be assumed that if this future reality is realized Israel will have a full nuclear triad. These second strike capabilities will also likely include a command and control system and a national decision making apparatus that can withstand a first strike.

The Nuclear Ambiguity Policy

Should Israel continue with its policy of nuclear ambiguity, whereby it does not discuss whether it has a military nuclear capability?⁶ There is a strong global and regional perception that Israel is an advanced nuclear power, and it can be assumed that if Israel makes nuclear threats, those threatened will believe that Israel has the capabilities necessary to realize them. Doubts would probably relate to Israel's resolve in realizing its threats. On the other end of the debate, however, is a widely accepted view that for credible nuclear deterrence the other parties should have a clear knowledge of your second strike capabilities, and therefore the parties of such deterrence equations should expose their capabilities. This does not mesh with a policy of nuclear ambiguity.

In addition, if/when there are other nuclear powers in the Middle East, Israel would presumably not pay the same political price it would pay now, if it acknowledged its status as a nuclear power.

The Role of Extended Deterrence

There is likewise a debate in Israel on the role of US extended deterrence in providing for strategic stability in the Middle East.⁷ Trusting extended deterrence contradicts the Israeli ethos of "only we can defend ourselves," and that argument joins the vast debate on the credibility of extended deterrence. The question here is, will the US be willing to sacrifice New York to protect Tel Aviv? It seems reasonable that because of the combination of these considerations Israel will look at US extended deterrence as something that can be only partially trusted and comes on top of its own deterrence capabilities, and is not the main component of its deterrence posture. There will also be very limited willingness to pay any price, political or other, for US willingness to extend its deterrence to Israel. In this context there is

much opposition in Israel to the idea of a US-Israel defense treaty, because it may limit Israel's freedom of decision and operation.

Missile Defense and Strategic Stability

In the bipolar context, ballistic missile defense was considered destabilizing and a threat to strategic stability. This led to the conclusion in 1972 of the ABM treaty that actually forbade the deployment of missile defense systems by the US and the Soviet Union other than some limited deployment. In the Middle East, ballistic missiles with conventional warheads were often used as a terror weapon against cities. The last striking example is the use of ballistic missiles by the Assad regime in Syria in the framework of the civil war to attack cities that are under rebel control. In light of this recent experience, missile defense is commanding new attention in the military buildup of the states of the region. Israel is pioneering the use of missile defense systems, and is currently deploying a national missile defense based on the indigenously developed and produced Arrow 2 system. Gradually other systems aimed at protection against shorter range missiles and rockets are deployed. That is significant because due to the short distances in the Middle East, when it comes to missiles and missile defense, the lines between the tactical and the strategic are blurred. The concern of the growing ballistic missile capabilities of Iran and its nuclear program are causing other states to consider deployment of missile defense systems. The recent examples are some Arab Gulf states and Turkey, which is procuring a Chinese-made missile defense system.

Nuclear proliferation in the Middle East will probably not lead the region's states to give up their missile defense out of theoretical considerations that it may be harmful to strategic stability. Most likely, it will lead to an even greater focus on enhancing missile defense. States in the region distrust each other and they will be reluctant to be completely exposed to nuclear or other ballistic missile attack based on an abstract concept such as strategic stability. What can be expected in the regional discourse would be rationalization of deployment of missile defense systems in a nuclear environment. The main argument would probably be that missile defense is one of the components needed to safeguard the survivability of second strike capabilities,⁸ and in any case, as no missile defense system can protect completely against a nuclear attack, its perceived damage to strategic stability is exaggerated.

Communication among the Nuclear Parties

The Middle East is characterized by a lack of communication between the states. Sometimes even diplomatic relations are beyond reach, and that is especially true in the case of Israel. Lack of communication may inhibit strategic stability among nuclear powers. The international community will have to play a major role in pushing the nuclear states in the region to establish credible channels of communication in this future reality.

Dealing with Sub-Nuclear Conflicts

Israel must assume that the regional states armed with nuclear weapons will be more similar to Pakistan than to the superpowers. That means that it will not cause them to be more cautious and avoid sub-nuclear conflict that may escalate to nuclear conflicts. Israel will have to take into account situations in which some states will be even more willing to initiate sub-nuclear conflicts because of a feeling of immunity. They may also try to extend their nuclear umbrellas to their allies and proxies, for example, Iran giving extended nuclear deterrence to Syria and Hezbollah in Lebanon. That will complicate Israel's engagement in sub-nuclear conflicts because of the need to contain further escalation.

Arms Control

In a multi-nuclear Middle East the region's states will have to consider arms control arrangements as a way of augmenting strategic stability. This will also depend on the general political developments in the Middle East – whether these developments facilitate progress toward a cooperative security regime in the region or only inhibit such progress.

Conclusion

Schelling has been proven correct, and certainly proliferation of nuclear weapons in the Middle East will make it very difficult, if at all possible, to establish strategic stability, assuming that we understand the meaning of the concept in such a complex environment. That provides a strong reason why the international community and the relevant actors should take any possible means to prevent such proliferation.

If proliferation occurs, however, Israel will probably take all necessary steps to achieve strategic stability as much as possible through establishing

a credible second strike capability, and other supporting means such as an enhanced national missile defense system.

All the parties may eventually find that it is time to start negotiating arms control agreements to try to manage the inherent instability that results from nuclear proliferation in this region. That will likely be a long and not easy process.

Notes

- 1 Thomas C. Schelling, "Foreword," in *Strategic Stability: Contending Interpretations*, eds. Elbridge A. Colby and Michael S. Gerson (Strategic Studies Institute and US Army War College Press, 2013), p. vii.
- 2 Michael S. Gerson, "The Origins of Strategic Stability: The United States and the Threat of Surprise Attack," in *Strategic Stability: Contending Interpretations*, p. 1.
- 3 "That's How the Bunker of the Prime Minister Looks," *Channel 2 News*, February 15, 2009, <http://goo.gl/DwYGlx>.
- 4 "Israel Submarine Capabilities," Nuclear Threat Initiative, <http://www.nti.org/analysis/articles/israel-submarine-capabilities/>; "Operation Samson: Israel's Deployments of Nuclear Missiles on Submarines from Germany," *Der Spiegel Online*, <http://goo.gl/XfUXO>.
- 5 Alon Ben-David, "Israel Tests Enhanced Ballistic Missile," *Aviation Week*, July 29, 2013, http://www.aviationweek.com/Article.aspx?id=article-xml/AW_07_29_2013_p36-598763.xml.
- 6 See for example Ephraim Kam, *A Nuclear Iran: What Does it Mean and What Can be Done*, Memorandum 88 (Tel Aviv: Institute for National Security Studies, 2007), p. 79.
- 7 See, for example, Yair Evron on the possibility of a US-Israel defense treaty that may enhance extended deterrence aimed at Iran, in Yair Evron, "An Israel-Iran Balance of Nuclear Deterrence: Seeds of Instability," in *Israel and a Nuclear Iran*, ed. Ephraim Kam, Memorandum No. 94 (Tel Aviv: Institute for National Security Studies, 2008), p. 61.
- 8 Indeed that was the line of argument made by Uzi Rubin, the former director of the Israeli MOD missile defense program, in a presentation at a conference on missile defense conference in Tel Aviv at INSS: "Missile Defense: Asset or Liability for Regional and International Stability," January 15, 2014.

From Nuclear Disarmament to “Strategic Stability”: Implications for Israel of an Emerging Global Debate

Emily B. Landau

Introduction

Strategic developments in the Middle East that challenge Israel’s security – most importantly, Iran’s continued ambition to maintain a military nuclear breakout capability (despite the Joint Comprehensive Plan of Action – JCPOA – announced in July 2015), and international interest in advancing a Weapons of Mass Destruction-free zone (WMDFZ) in the Middle East – have over the past decade been accompanied at the global level by new developments with potentially far-reaching strategic implications. Of particular interest are the “Global Zero” movement in the nuclear realm and the strategic debates it has invited on arms control, deterrence, and “strategic stability,” along with more recent developments that have rekindled superpower calculations on the nuclear level reminiscent of the Cold War years.

Movement either in the direction of further nuclear reductions or back to Cold War dynamics would have direct implications for the security of states across the Middle East. This article, however, discusses the more indirect influences on the Middle East that might emanate both from the evolving global debate on nuclear disarmament and from shifting notions of what is required in order to maintain deterrence and strategic stability in today’s complex and still proliferating world. Attention will be directed to new thinking and attitudes that are emerging at the global level and their

A previous version of this article was first posted on a closed website managed by the Program on Strategic Stability Evaluation (POSSE) in July 2014. The author would like to acknowledge the generous support of POSSE, sponsored by the Carnegie Corporation of New York.

possible impact on how regional dynamics are regarded, with a particular view to Israel's security calculations.

The global disarmament debate carries with it an implicit message that the goal of a nuclear free world is across-the-board nuclear reductions, regardless of the specifics of particular cases – namely, the prominent threat perceptions and security concerns of particular states, whether states are defensively or offensively oriented in the nuclear realm, and their overall record of behavior toward nuclear issues. Although US President Obama stated clearly in 2009 that in striving for a world free of nuclear weapons, nuclear deterrence would have to be maintained for the foreseeable future, the disarmament message that gained traction in the US and beyond is nonetheless that nuclear weapons must be eliminated, period. This weapons-based agenda could render states less sensitive to Israel's claim that it faces unique strategic challenges, especially vis-à-vis Iran in the post-JCPOA period.

Conversely, the new focus on the challenge of complex multipolar nuclear deterrence equations at the global level – characteristic of the post-Cold War world, and expected to come into sharper relief if the US considers more significant nuclear reductions – could harbor a different message. This challenge, together with new challenges from Russia and the poor results in efforts to dismantle North Korea's nuclear capability and prevent Iran from becoming a nuclear state through negotiations, may make global actors more sensitive to the strategic dilemmas that Israel faces in the Middle East. Multipolarity seriously complicates states' security calculations, and this is certainly the case for Israel when it contemplates its strategic deterrence stance in the Middle East.

Global Zero: Nuclear Reductions, with Continued Deterrence

A global movement in support of ridding the world of nuclear weapons has taken shape in the new millennium. The roots of this movement lie in thinking that originated in non-official circles in the United States. Henry Kissinger, William Perry, George Shultz, and Sam Nunn – four distinguished former high level US statesmen – are largely responsible for codifying, if not initiating the movement calling for a world free of nuclear weapons in two highly influential op-eds published in the *Wall Street Journal* in January 2007 and January 2008.¹ The agenda that they advocated in these op-eds was thereafter adopted by President Obama early in his first term, when he

presented an official nuclear disarmament agenda in his first major foreign policy address, delivered in Prague in April 2009.

Kissinger et al advocated global nuclear reductions in 2007 because they believed that in the post-Cold War world, America’s relationship with Russia had changed for the better, and that the real danger no longer emanated from the former Cold War rival. Rather, the biggest fear was that nuclear weapons could fall into the wrong hands, especially the hands of terrorists, and for this reason they must be eliminated across the globe. In this sense Kissinger’s rationale for global nuclear reductions was far from a classic disarmament agenda – i.e., which viewed nuclear weapons as inherently evil and therefore called to eliminate them on this basis – and he remained keenly aware of the importance of upholding US deterrence and maintaining strategic stability along the way. From the outset, Obama’s own disarmament agenda reflected similar thinking: the President emphasized that as long as nuclear weapons existed, the United States would maintain a safe, secure, and effective arsenal to protect the US and its allies.

Strategic Stability: Adapting a Cold War Concept to a Multipolar World

“Strategic stability,” a concept that for years had been at the heart of the notion of mutual assured destruction (MAD) that supported the US-Soviet nuclear deterrence equation during the Cold War years, thus continued to figure high in US strategic thinking. Since the 1970s it had also been a guiding principle for pursuing nuclear reductions in the context of US-Soviet arms control agreements.² Indeed, for advocates of nuclear arms control – as distinct from nuclear disarmament – the goal was always to stabilize relations between the superpowers in order to mitigate the dangers of mis-escalation to nuclear war. Arms control as an approach thus focuses more on the state than the nuclear weapons per se. The logic of this approach is that if nuclear-armed states can begin to create lines of communication and agree on confidence building measures, this would gradually help them lower tensions and hopefully defuse hair-trigger alert situations. If they could create conditions for maintaining stable relations, with a heavy dose of verification and some trust thrown in, the superpowers could carve out rules of the game for their nuclear relationship. Adherence to these rules would lower the risk that they might find themselves on the brink of nuclear exchange, and thus enable them to coexist in a nuclear world.

Underpinning the stabilization of relations thinking in the Cold War superpower context was nuclear deterrence; and deterrence meant maintaining rough parity in nuclear capabilities. With the continued ability to destroy each other, stability in this context was clearly more about state perceptions and behavior than the very capabilities at the superpowers' disposal, although arms control agreements also involved symmetrical reductions in the nuclear arsenals themselves.

Although it was difficult to create mechanisms of stability between two superpowers armed to the teeth with nuclear weapons, the Cold War challenge was nevertheless limited primarily to two powers. What happens when additional states come into the equation? How can deterrence be stabilized when the superpowers begin to reduce their arsenals to levels that might approach those of other nuclear states?

Obama's nuclear disarmament agenda, together with ongoing US-Russian arms control dilemmas, the rising influence of China, and the thorny debate over NATO missile defense plans for Europe, brought to the fore old debates – with new questions being asked about how strategic stability would continue to be maintained in changing global conditions. Indeed, when Obama began to consider deeper cuts in the US nuclear arsenal, Kissinger sounded the “strategic stability” alarm. In an op-ed written in April 2012 together with Brent Scowcroft, he asked what happens to strategic stability when the numbers go down well below the threshold of 1000 nuclear warheads.³

A major concern for the US in this regard was China.⁴ The need to maintain strategic stability with both Russia and China, and to provide assurances and nuclear umbrellas to US allies, remained an important issue in the debate over nuclear weapons reductions. Russia too in 2013 emphasized that the disarmament thrust could not be limited to the US and Russia, and must encompass all nuclear states.⁵ Moreover, for Russia, the debate on nuclear reductions could not be detached from NATO plans for missile defense systems to be set up in Europe.

A Shifting Concept and a New Complication

In light of these concerns, in Obama's second term the balance between nuclear reductions and the imperative of maintaining strategic stability (grounded in deterrence) tilted more toward strategic stability, which requires the US to maintain the safe, secure, and effective nuclear deterrent that Obama advocated in Prague.⁶ Indeed, although the global zero narrative

was established and gathered strength in Obama's first term in office – and in particular in the first year of his administration, from mid-2009 to mid-2010 – by the time his second term began, it was apparent that the agenda was losing steam. Although some progress was made at the Nuclear Security Summits, the US 2015 budget proposal cut funding for nuclear security efforts; moreover, the CTBT – another of the prominent disarmament goals of the Obama administration – is still no closer to ratification. And although in his Berlin speech in June 2013 Obama revisited his earlier nuclear disarmament agenda, a comparison of the two speeches reveals that the relevant passages in the Berlin speech are a much curtailed and watered-down version of the dramatic Prague speech.⁷

The only significant disarmament message delivered by Obama in 2013 regarded further reductions in the US nuclear arsenal (up to a third) that he maintained could safely be made while still ensuring the security of the US and its allies, and maintaining a strong and stable nuclear deterrent. However, simultaneous (and costly) US plans for modernizing its nuclear weapons arsenal could not but raise questions as to whether the US indeed intended to move in the direction of deep nuclear cuts.⁸

Since 2014, the picture has gotten even more complicated: the one component in the increasingly complex nuclear equation of the post-Cold War world that was regarded by the US as relatively contained was Russia. However, Russia's intervention in Ukrainian internal affairs and its annexation of the Crimean peninsula in March 2014 presented a new challenge that elicited another shift in the nuclear discourse, even more in the direction of the deterrence pole. This was a reminder that nuclear issues cannot be discussed effectively outside the context of inter-state relations. The original op-eds of Kissinger et al calling for a nuclear-free world relied on the fact that America's relationship with Russia had changed for the better, but with this relationship looking potentially more fragile, nuclear arsenals and umbrellas were looking more attractive. Indeed, since the Ukraine crisis, the US and Russia seem to be favoring Cold War-like deterrence thinking over the pursuit of further nuclear reductions.⁹

Three issues in particular were (re)opened for debate: continued progress on bilateral US-Russian arms control agreements; the continued presence of NATO nuclear weapons in Europe, as well as plans for missile defense; and the fact that the Ukraine crisis underscored the vulnerability of a state

to attack when it relinquishes nuclear weapons, or other plans for WMD development.

The future of US-Russian bilateral arms control is currently unclear. While as yet there are no firm indications that Russia is not upholding its arms control commitments,¹⁰ the current tension makes it difficult to see a path forward to further agreements.¹¹ With regard to NATO, new attitudes have been expressed, especially from Poland and the Czech Republic, about the need to maintain US tactical nuclear weapons in Europe as a deterrent against Russia.¹² And on the issue of non-nuclear vulnerability, the fact that Ukraine was the target of Russian aggression is a message that states like Iran are hearing loud and clear. When Ukraine decided to relinquish its nuclear arsenal to Russia after gaining independence, the US and Russia made an explicit commitment not to attack the new state. Indeed, according to the terms of the Budapest Memorandum, signed in December 1994, Ukraine was provided security assurances, including the commitment to refrain from the threat or use of force against Ukraine's territorial integrity.¹³ The fact that Russia disregarded this explicit commitment further underscores the message – also apparent when NATO attacked Qaddafi's Libya – that giving up nuclear weapons (or, in the case of Libya, plans for WMD development) makes a state vulnerable to attack, and therefore it might be more prudent to hold on to them.¹⁴

The New Narrative and the Middle East

The question, then, is what the balance of these different messages is for the Middle East, and for Israel in particular. How do the different strands of debate that have emerged at the global level converge, and how are they expressed in attitudes and policies toward the Middle East?

The different themes that are prominent in the global debate – disarmament, proliferation, strategic stability, deterrence, and missile defense – are all reflected in developments and debates in the Middle East as well, although they take on quite different meanings because of the region's singular context. The Middle East, as a region, follows its own regional dynamic; multipolarity is ingrained in its geopolitics and is thus integral to discussions about deterrence and regional security.

The Middle East has also been characterized by a very different nuclear dynamic than the one that has played out at the global level in several important respects. For decades there has been one assumed nuclear state

in the Middle East – Israel – that introduced novel elements to the nuclear debate: most significantly, the concept of ambiguity; the notion of nuclear monopoly; and an Israeli nuclear stance that has a single aim: to deter an existential threat. This motivation does not come into play in scenarios that are short of existential. Although there were attempts on the part of additional states in the region to pursue the nuclear path, these were not in response to Israel, but to other perceived challenges. Oddly enough, at the strategic level, the situation in the Middle East was remarkably stable with the presence of one (assumed) nuclear state. Moreover, it is the prospect of the emergence of a second nuclear state – Iran – that would undoubtedly upset and undermine stability in the region, especially by encouraging further proliferation.

This proposition will no doubt seem counterintuitive to those who, drawing on global experience, have argued that a second nuclear state would (finally) introduce stability to the Middle East.¹⁵ However, over the course of forty years, implicit nuclear understandings were established in the Middle East that played out quite differently than at the global level. Indeed, global zero thinking could, from Israel's point of view, upset this situation by opening more space for questioning not only Israel's policy of nuclear ambiguity, but the very rationale for its nuclear deterrence. The embrace of a world-free-of-nuclear-weapons discourse – which puts the spotlight on the weapons, and removes the state from the discussion – could make it easier for people to buy into arguments derived from simplistic links drawn between what are actually very different and unequal cases. For example, with the focus solely on the weapons, and based on the assumption that states are normally defensively oriented in the nuclear realm, it might seem obvious to some that if Israel were not an (assumed) nuclear state, Iran would not have felt the need to go down the nuclear route. The history of the Middle East, of course, tells a very different story and leads to different conclusions – but any accurate narrative demands the serious integration of context into nuclear arms control thinking.¹⁶ The disarmament agenda, however, encourages the exact opposite.

The Middle East is also characterized by a severe deficit of trust as far as states' adherence to their WMD arms control/disarmament commitments. Contrary to the global level, in the Middle East a culture of deceit became the norm following the blatant cheating by a string of states on their disarmament commitments. This was the case in Iraq (Saddam Hussein), Libya, Syria

(nuclear and chemical), and Iran. The actual use of chemical weapons by the Assad regime in 2013 against its own population was a particularly horrific reminder that in the Middle East, the context of state relations and behavior cannot be left outside discussions of WMD disarmament, and that processes of trust-building have a very long way to go in this region.

The Balance of Messages from the Global Debate

When considering the strands of the global debate, it is difficult to assess which message rings loudest. Originally it seemed that the global zero agenda stood to become the dominant message, and when it was adopted by President Obama in 2009, the sense was that the implications for Israel in particular could be profound. From Israel's perspective, the 2010 NPT RevCon final document reflected the kind of difficulties that Israel would likely face. Egypt was successful in pressuring the Obama administration to agree to include the WMDFZ conference idea in large part due to Obama's embrace of a disarmament agenda that supported across-the-board nuclear reductions. The administration was constrained by its own adherence to the disarmament norm – a phenomenon known as normative entrapment. This weakened its ability to make the case for unique security concerns in the case of Israel. Moreover, commitment to the disarmament agenda meant that Obama was also keen on securing a consensus final document for the NPT RevCon (after the resounding failure to do so in 2005), which only increased his vulnerability to Egyptian manipulation.¹⁷

But the original disarmament agenda, which from the start recognized the continued importance of deterrence and strategic stability, has over the last few years become even more muddled, as stubborn nuclear challenges refuse to recede from the global scene. Whether it is determined and quite aggressive proliferators like Iran and North Korea, or Russia implicitly underscoring for these states that acquiring and holding on to nuclear capabilities is what might actually enable them to ward off external coercive measures, the global discourse is a mixed bag. It advocates nuclear reductions, but also missile defenses and modernization of remaining nuclear arsenals so that safety and security are maintained.

As for the WMDFZ conference for the Middle East, in the years since 2010, there were indications of increased understanding in the United States and among other conference conveners, most likely including the Finnish facilitator Ambassador Jaakko Laajava, that such a zone necessitates vastly

improved regional relations. This was reflected in the US decision to postpone the conference in November 2012, and in the rationale that was provided for this decision.¹⁸ Moreover, it became apparent over the course of 2013 that Israel was willing to engage in preliminary direct discussions with its Arab neighbors over a conference agenda, while these states were reluctant to participate until a date for the conference was set. Arab resistance to discussions of regional security underscored that they were not genuinely interested in regional improvement, but rather focused on an agenda that would target Israel and the nuclear realm. For the conference conveners, this further underscored the importance of inter-state exchange and confidence building.¹⁹

Strategic Complexity in the Middle East Demands Regional Solutions

The Middle East is characterized by strategic complexity that demands tailored regional thinking and solutions. Iran continues to pose a nuclear proliferation challenge that at best will only be somewhat delayed by the terms of the JCPOA; this challenge is superimposed on Iran’s aggressive regional policy toward Israel and additional Middle East states, a regional hegemonic agenda, and support for terrorist proxies. Iran engenders an acute lack of trust after years of blatantly deceiving the international community regarding its NPT commitment not to pursue a military nuclear capability. Moreover, the trust deficit regarding WMD commitments cuts across the region to additional states as well. For its part, Israel for years has based its most fundamental security – insurance against an existential threat – on a nuclear deterrent capability, yet Egypt continues to seek to strip Israel of this capability. Finally, bids for extended deterrence and missile defense systems are raised in many states in the region, in order to confront an entire spectrum of rocket and missile threats from different directions.

With these complex conditions, the global zero nuclear disarmament agenda – however worthy in and of itself – cannot simply be imposed on the region. But the new challenges at the global level might generate a better understanding of this conundrum, and of the regional predicaments that Israel faces in the Middle East. Indeed, although the disarmament agenda would seem to encourage greater focus on the need for Israel to join the NPT, the US is not pressing this issue. Nor is it pressing progress on the WMDFZ conference initiative following the 2015 NPT RevCon, which effectively

removed the issue from the NPT agenda due to lack of consensus on a final document. The US and Russia had displayed understanding for Israel's position even before the 2015 RevCon – both regarding the structural oddity of holding a conference according to a mandate that Israel was not a party to, as well as the more fundamental need to address the Middle East context in all of its complexity, rather than focus directly on a WMD agenda.

In conclusion, the strategic complexities that have emerged at the global level in recent years – and that reopened debates on arms control, deterrence, and strategic stability – could actually harbor a more reassuring message for Israel. These new post-Cold War challenges might help convince major powers to be more attentive to ongoing strategic dilemmas in the Middle East as well. This is likely to push further to the background ideas for embracing simplistic nuclear disarmament agendas that do not take very seriously the complex web of interstate threats and challenges that Israel faces in the Middle East, and underscore the need to address regional security challenges in a regional context.

Notes

- 1 George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, January 4, 2007, and George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "Toward a Nuclear-Free World," *Wall Street Journal*, January 15, 2008.
- 2 As Paul Nitze wrote when discussing the SALT talks in the 1970s: "My personal view is that meaningful reductions are highly desirable, and that the aim of reductions should be to increase strategic stability." See Paul H. Nitze, "Assuring Strategic Stability in an Era of Détente," *Foreign Affairs* 54, no. 2 (1976), p. 221.
- 3 Henry A. Kissinger and Brent Scowcroft, "Nuclear Weapon Reductions must be Part of Strategic Analysis," *Washington Post*, April 22, 2012.
- 4 See Lora Saalman and Alexey Arbatov, "Russia-US-China: Trilateral Strategic Stability," Carnegie Endowment, April 24, 2012, <http://carnegieendowment.org/2012/04/24/russia-u.s.-china-trilateral-strategic-stability/bzha>. For a later assessment on the same dilemma, see Fiona S. Cunningham and M. Taylor Fravel, "Assuring Assured Retaliation: China's Nuclear Posture and US-China Strategic Stability," *International Security* 40, no. 2 (2015): 7-50.
- 5 "Nuclear Arms Reduction Deals to become Multilateral – Lavrov," *RIA Novosti*, June 22, 2013. <http://en.ria.ru/world/20130622/181811968/Nuclear-Arms-Reduction-Deals-to-Become-Multilateral--Lavrov.html>.
- 6 See for example the statement to the US Senate Armed Services Committee by Maj. Gen. Garrett Harencak, Assistant Chief of Staff, Strategic Deterrence and Nuclear Integration, March 5, 2014.

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- 11 Douglas P. Guarino, "White House Expects Russia to Stick to Arms Treaties, Despite Ukraine Crisis," *Global Security Newswire*, March 12, 2014. There was concern that the crisis could also upset efforts to continue to secure vulnerable nuclear materials in Russia, in the context of what was known as the Nunn-Lugar agreement from the early 1990s, but the situation seems to be on track. On lack of progress on US-Russian arms control since 2010, see Steven Pifer, "The Future of US-Russian Arms Control," *Brookings Paper*, February 26, 2016, <http://www.brookings.edu/research/papers/2016/02/26-future-us-russian-arms-control-pifer>.
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