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NATO and 21st Century Deterrence

8

# NATO Defense College Collège de Défense de l'OTAN

# FORUM

# NATO and 21<sup>st</sup> Century Deterrence

Edited by Karl-Heinz Kamp and David S. Yost

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### NATO DEFENSE COLLEGE COLLEGE DE DEFENSE DE L'OTAN

Research Division Division Recherche

# NATO AND 21st CENTURY DETERRENCE

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### NATO AND 21ST CENTURY DETERRENCE

### Karl-Heinz KAMP\*

Deterrence, as a concept based on the threat of immense retaliation by governments if attacked, has been a dominating element in NATO's strategy over the last six decades. During the Cold War, deterrence was understood mostly in a nuclear context, but already at that time it had strong non-nuclear components. Discussions in the early 1980s about the "conventionalization of NATO strategy" indicate the constant struggle within the Alliance to find answers to the key questions of "how" to deter the opponent with "what".

Since the demise of the Soviet Union, the need for deterrence has remained, but it has changed with regard to its requirements. The set of questions on the "how" and "what" has been enriched by the need to clarify "who" needs to be deterred. Whereas during the East-West conflict the object of NATO's deterrence efforts was primarily the Soviet leadership, the spectrum of addressees for deterrence messages has widened significantly to include a variety of state and non-state actors.

Only a few NATO members have adapted their deterrence posture and their strategic thinking to the new realities. The United States, in particular, has discussed and at least partly adopted new deterrence concepts in order to have a broader toolbox in dealing with the security challenges ahead. "Prompt Global Strike" is one such concept, banking on the idea

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<sup>&</sup>lt;sup>1</sup> See Robert R. Bowie et al., *Strengthening Conventional Deterrence in Europe: Proposals for the 1980s*. Report of the European Security Study (ESECS), London and New York: St. Martin's Press, 1983.

that – provided there is sufficient intelligence – terrorist camps or production sites for weapons of mass destruction (WMD) can be destroyed by conventional means immediately after their detection, presumably in a preemptive manner. The deterrence message conveyed to potential aggressors is that there will be no safe haven in which to hide from physical destruction. Another concept is "nuclear forensics", a term signifying the technical capability to detect the physical composition of radiological material even after a nuclear detonation. Given that radioactive substances always have a "fingerprint" that indicates their origin and how they were processed, it is possible to trace the substances back to the country or region where they came from. Again, provided there is sufficient intelligence, the country in question could be held responsible for intentionally or unintentionally passing the material to those who have made aggressive use of it. The deterrence message would be that there is no way to escape punishment.

Most European NATO allies, though, have scarcely taken notice of these developments. The new challenges to the effectiveness of deterrence have not been discussed, and there has been no in-depth discussion of new concepts and potential solutions. Strangely enough, the need to think more deeply about deterrence has been ignored even when it has been on the immediate political agenda. For some years now, there has been an intense debate on how to deal with Iran's nuclear ambitions. A myriad of concepts, ideas and strategies has been developed to keep Teheran from developing nuclear capabilities which could lead sooner or later to the Iranian bomb. So far, these strategies have not been successful. At the same time, hardly any effort has been made to assess the deterrence implications after Iran has become a nuclear weapons state (assuming that preventive measures will not succeed). How can the mullah regime be kept from instrumentalizing its nuclear status in an aggressive manner? What are the political or military means to ensure Iranian self-restraint? Is the government in Teheran "deterrable" at all? None of these questions has received sufficient attention.

Deterrence on a more general level has received even less consideration and reasoning. This holds true for the nuclear dimension as well as

for its non nuclear aspects. Hence, there is still a demand in the Atlantic Alliance for a fundamental analysis and assessment of the key questions of *how* to deter *whom* with *which* means.

However, things are now in a state of flux, as external developments have put increasing pressure on the Alliance to stop ignoring the fact that a deterrence debate is overdue. This holds particularly true for the nuclear realm, where a significant contradiction between a nuclear renaissance and an erosion of deterrence has emerged.

On the one hand, there has been a renaissance of the nuclear dimension of international politics, due to at least four reasons.

- First, there will be a further increase in the number of nuclear players in international relations. North Korea has already crossed the nuclear threshold and Iran is about to do so. This is likely to encourage other countries in the respective regions to explore national nuclear options.
- Second, energy scarcity will be a problem of increasing relevance, forcing more governments to bank on civil nuclear energy. The rising number of nuclear power plants will result in an increase in the amount of nuclear expertise and nuclear material.
- Third, should the constantly mentioned radiological threat i.e., the detonation of a "dirty bomb" made of radioactive substances and conventional explosives come true, the "nuclear danger" would be at the top of the international agenda, even if the impact of the action in terms of damage or casualties was limited.
- Fourth, certain recent developments, including the Russian military action against Georgia, are likely to re-emphasize nuclear issues as well. In the meantime, questions not only on the sincerity of NATO's security assurances but also on the credibility of extended nuclear deterrence (the nuclear commitments for NATO's non-nuclear members) have made their way back to the fore.

Parallel to the nuclear renaissance, there are three processes of erosion going on. First, there is a constant corrosion of the international non-proliferation regime. The guiding principle of the Non-Proliferation Treaty (NPT) was to reward military nuclear restraint with support in the field of civil nuclear energy. As the technical requirements in both fields are largely similar, it is possible for an NPT signatory state to come close to a nuclear weapons capability without treaty violations. Furthermore, the activities of the Pakistani nuclear "dealer" A.Q. Khan have shown that nuclear proliferation happens at least partly outside interstate relations – thereby circumventing the control mechanism of the state-based NPT.

Second, the idea of nuclear deterrence itself is also eroding. The new international environment of aggressive states governed by religious zeal, failed states with no government at all, non-state actors and terrorists, wealthy and trained enough to acquire and master weapons of mass destruction, calls into question the effectiveness of deterrence. Some see the hurdles piling up against effective deterrence concepts as insurmountable and call for a complete denuclearization of international relations. Only a nuclear weapons free world, they argue, can ensure that a nuclear explosion never occurs. This simplistic but convincing logic is not new, but it has received a kind of blessing from prominent strategic thinkers, such as Henry Kissinger, who have aligned with that reasoning.<sup>2</sup>

The third erosive process is directly related to the Atlantic Alliance. For some time now, NATO has been confronted with a constant wearing down of its nuclear concepts and posture. Conceptually, NATO has not yet answered the question of how to keep up 21st century deterrence with concepts and techniques that were optimized for the bipolar confrontation decades ago. Technically, NATO is facing the problem that one key element of dual key deterrence, in which the United States provides the nuclear weapons and NATO allies take care of the means of delivery, is eroding. The Tornado and F-16 aircraft serving as weapons

<sup>2</sup> See George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, 4 January 2007; and George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn, "Toward a Nuclear-Free World," *Wall Street Journal*, 15 January 2008.

delivery platforms in NATO member states with so-called "dual key arrangements", have finite life cycles. In the next few years, the allies concerned will have to agree on new aircraft to carry the nuclear bombs still deployed in a number of NATO countries. An agreement of this kind will be difficult as it will involve a number of tricky political, military and technical questions.

The mismatch between the increasing relevance of nuclear or nonnuclear deterrence requirements and the reluctance of decision makers to take note of these developments is striking. What is missing is an extended debate, at least on the level of experts.

For this purpose, NATO's Nuclear Policy Directorate in Brussels, the Defense Threat Reduction Agency in Washington, D.C., and the NATO Defense College in Rome combined their efforts to bring a number of internationally renowned security experts together in Rome to discuss some of the aspects mentioned above. The Rome meeting was the third in a series of seminars dealing with deterrence questions facing the Atlantic Alliance. Professor David S. Yost, from the Naval Postgraduate School in Monterey, California, functioned as the "intellectual mastermind" conceptualizing the meetings in a cohesive manner. This edited volume contains the contributions of the participants in the Rome conference and will, it is hoped, serve as a stimulus for further deliberations and discussion on a very important aspect of adapting NATO to the challenges ahead.

### NATO AND TAILORED DETERRENCE: SURVEYING THE CHALLENGES

### David S. YOST\*

The U.S. Department of Defense has officially employed the phrase "tailored deterrence" since the 2006 Quadrennial Defense Review. The other NATO Allies have also given the concept some attention, but it remains largely unexplored on both sides of the Atlantic. Important conceptual and practical questions have yet to be answered.

This paper offers a survey of the challenges. It examines general concepts of deterrence before turning to definitions of tailored deterrence, intrinsic problems in implementing the concept, and specific potential implications for NATO in maintaining and modernizing its deterrence posture. It reports key findings from three workshops on NATO and deterrence in 2007-2008. It concludes with a brief review of the grounds for holding that NATO can meet the challenges presented by new deterrence requirements.

<sup>\*</sup> Professor, Naval Postgraduate School, Monterey, California. The views expressed are the author's alone and do not represent those of the Department of the Navy or any U.S. government agency. Special thanks are owed to Jerome Conley, Joseph Pilat, and Colin Stockman for their helpful comments on earlier drafts of this paper.

<sup>&</sup>lt;sup>1</sup> The first workshop, entitled "NATO and Tailored Deterrence: Understanding and Communication in Deterrence," was convened in Brussels on 16-17 October 2007. The second workshop, entitled "Tailored Deterrence in the Transatlantic Alliance: Nuclear, Conventional and Non-Military Strategies," took place at Wilton Park, Steyning, England, on 16-19 March 2008. The third workshop, entitled "NATO and 21st Century Deterrence: New Concepts, Capabilities, and Challenges for Deterrence," was held at the NATO Defense College in Rome on 29-30 April 2008. The first workshop was co-sponsored by the NATO Nuclear Policy Directorate and the Defense Threat Reduction Agency's Advanced Systems and Concepts Office (DTRA/ASCO). The second was co-sponsored by Wilton Park and the NATO Nuclear Policy Directorate. The third was co-sponsored by the NATO Nuclear Policy Directorate. The third was co-sponsored by the NATO Nuclear Policy Directorate, the NATO Defense College, and DTRA/ASCO. In accordance with the Chatham House rule, no views expressed at these workshops are attributed to specific individuals in this paper.

### **Concepts of deterrence**

The best way to approach definitions of "tailored deterrence" might be to consider some more general concepts of deterrence. Deterrence involves threats and associated efforts to prevent another state — or a non-state actor — from taking action against one's interests.

There is a relationship between deterrence and compellence in that threats are involved. However, some commentators say that compellence concerns forcing someone to do something while deterrence means convincing someone not to do something. Thomas Schelling presented the contrast as follows:

Deterrence involves setting the stage — by announcement, by rigging the trip-wire, by incurring the obligation — and waiting. The overt act is up to the opponent. The stage-setting can often be nonintrusive, nonhostile, nonprovocative. The act that is intrusive, hostile, or provocative is usually the one to be deterred; the deterrent threat only changes the consequences if the act in question — the one to be deterred — is then taken. Compellence, in contrast, usually involves initiating an action (or an irrevocable commitment to action) that can cease, or become harmless, only if the opponent responds. The overt act, the first step, is up to the side that makes the compellent threat. To deter, one digs in, or lays a minefield, and waits—in the interest of inaction. To compel, one gets up enough momentum (figuratively, but sometimes literally) to make the other act to avoid collision.<sup>2</sup>

It has become customary in the United States since the late 1950s to distinguish between two basic types of deterrence, and to describe them with the terms proposed by Glen Snyder in 1959.

The first is deterrence by threat of punishment. Snyder's Cold War

<sup>&</sup>lt;sup>2</sup> Thomas C. Schelling, *Arms and Influence* (New Haven and London: Yale University Press, 1966), pp. 71-72; emphasis in original.

analysis emphasized the U.S. threat of nuclear retaliation against the Soviet Union. In Snyder's words, "deterrence of a direct Soviet assault on the United States . . . is almost exclusively an airpower job," though "naval strategic capabilities . . . [are] destined, no doubt, to play an increasing role in the future." Retaliatory punishment could, however, take many forms — from an attack against the enemy's society, such as Snyder discussed, to economic sanctions or war crimes prosecution or regime change. The essential idea is to deter the adversary from taking unwanted action by threatening punitive retaliation.

The second type is deterrence by denial, which might also be called the threat of operational defeat. In Snyder's analytical framework in the late 1950s, deterrence by denial relied on conventional and theater nuclear forces capable of defeating Soviet aggression on the battlefield — and hence denying Moscow success in seizing territory. In his words, "a denial capability can play a significant role in deterring . . . Soviet aggressive moves around the periphery of its empire in Europe and Asia." This form of deterrence tells the adversary not to attack because he will be defeated in combat and/or will fail to inflict the damage he intends to cause. Capabilities that may send a "deterrence by denial" message include not only conventional combat forces but also means to counter attacks and mitigate their effects. These means encompass, but are not limited to, air and missile defenses, protective and decontamination equipment designed to operate against CBRN attacks,<sup>5</sup> and consequence management assets.

### Tailored deterrence

The phrase "tailored deterrence" seems to have first entered the official lexicon of the U.S. Department of Defense with the 2006 Quadrennial Defense Review, which said that the United States must move

<sup>&</sup>lt;sup>3</sup> Glenn H. Snyder, *Deterrence by Denial and Punishment*, Research Monograph no. 1 (Princeton, N.J.: Center of International Studies, Woodrow Wilson School of Public and International Affairs, Princeton University, January 1959), p. 3.

<sup>4</sup> Ihid

<sup>&</sup>lt;sup>5</sup> NATO's Multinational Chemical, Biological, Radiological and Nuclear (CBRN) Defence Battalion achieved its initial operational capability in December 2003.

away "From 'one size fits all' deterrence — to tailored deterrence for rogue powers, terrorist networks and near-peer competitors." The 2006 QDR also referred to the need for "more tailorable capabilities to deter advanced military powers, regional WMD states, or non-state terrorists." The 2006 QDR did not, however, offer a definition of tailored deterrence, nor did it analyze the various organizational and operational challenges it presents.

The basic idea of tailored deterrence is, to be sure, not new. As Keith Payne and other experts have pointed out, the "know the enemy" principle as the basis for strategies of deterrence and coercion dates back to Sun Tzu; and it has been prescribed by other authorities throughout history. Calling for an empirical focus on specific potential adversaries and contingencies seems novel to some observers only because of the apparent success of U.S. and NATO policies based on general assumptions about deterrence requirements during the Cold War. While there were some noteworthy efforts during the Cold War to tailor the U.S. and NATO deterrence posture to the Soviet threat, there were also efforts to come up with a sort of universal model of deterrence supposedly applicable to all adversaries in all circumstances. "Tailored deterrence" rejects the idea of "one size fits all" preparations. It calls for avoiding self-centered mirror-imaging and the projection of one's own values and priorities onto others. If "tailored deterrence" is feasible, its proponents say, it will be founded on detailed knowledge of particular adversaries and their decision-making patterns and priorities, not on a priori assumptions about the functioning of deterrence derived from Cold War experiences.

Keith Payne has argued that for tailored deterrence to work, it is essential

to "get inside" the decision-making process of the challenger, and to ascertain as far as possible the basis for its decision-

<sup>&</sup>lt;sup>6</sup> Quadrennial Defense Review Report (Washington, DC: U.S. Department of Defense, 6 February 2006), pp. vi, 4.

<sup>&</sup>lt;sup>7</sup> Keith B. Payne, *The Fallacies of Cold War Deterrence and a New Direction* (Lexington: The University Press of Kentucky, 2001), pp. 101-102.

making with regard to a specific context and flashpoint. In principle, this should facilitate formulation of a more effective deterrence policy because it will provide a better basis for anticipating a challenger's behavior. Correspondingly, this framework establishes a tool for identifying and characterizing the various factors (some likely unique, others subject to generalization) that may be critical to the functioning of deterrence and coercive threats in a specific case, and subsequently tailoring U.S. deterrence policies to that specific challenger and context.<sup>8</sup>

Payne's call for "tailoring U.S. deterrence policies to that specific challenger and context" is the essential metaphor. In 2001 Payne proposed a framework for "tailoring U.S. deterrence policies" to particular challengers. In 2007 Elaine Bunn adapted and extended the framework proposed by Payne and suggested a checklist of questions for "the calculus of tailored deterrence." As she pointed out, the concept of "tailored deterrence" encompasses three key facets of tailoring: (a) specific actors in particular situations, (b) capabilities, and (c) communications.

The key idea in tailored deterrence, as the word "tailored" implies, is that the United States and its allies ought to cut the cloth to fit the requirements of the case. If the objective were to deter someone from doing something — for instance, to convince an adversary not to attack a NATO ally — the Allies would need to know, among other things, his strategies, his motivations, and his decision-making system, as well as what he values. The Allies would also need to know how to communicate with him. Just as a tailor wants to make a suit fit, the Allies would want to make sure that all the elements of their deterrent posture — above all, their capabilities and declared policy — fit the requirements of the situation.

<sup>8</sup> *Ibid.*, p. 103.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> M. Elaine Bunn, "Can Deterrence Be Tailored?" Strategic Forum, Institute for National Strategic Studies, National Defense University, no. 225, January 2007, p. 3.

Moreover, just as a tailor may have several clients — some tall and some short, some fat and some thin — NATO may have to deal with several types of adversaries in the coming years: terrorist groups, regional powers armed with weapons of mass destruction, and even advanced military powers. The Alliance must therefore know how to define its policies and capabilities to meet multiple requirements.

In conjunction with the universalization tendency mentioned earlier, during the Cold War many people got in the habit of thinking of deterrence as based above all on nuclear forces and on posing a threat of nuclear retaliation so dreadful that it would surely terrify and deter the Soviet leadership.

The tailored deterrence approach differs from the outlook predominant in NATO during the Cold War because it is not focused on nuclear capabilities, but considers the full spectrum of capabilities that may contribute to deterrence, including conventional forces; robust consequence management capabilities; passive and active defenses, including air and missile defenses; capabilities to reliably attribute responsibility for anonymous attacks; and — for some observers — non-military instruments such as the threat of economic and diplomatic sanctions or prosecution for war crimes. The extent to which these non-military or "soft" instruments can contribute to deterrence, notably when they involve cooperation with private sector partners, is a contested point among experts. Allied experts also differ about the relevance of "conventional deterrence." Some note that NATO has been employing conventional forces since the early 1990s to deal with conflicts in which deterrence failed. It is nonetheless generally agreed that tailored deterrence must draw upon both "deterrence by denial" and "deterrence by threat of punishment" capabilities and analytical frameworks.

While uncertainties will always remain, and success in deterrence can never be guaranteed, the tailored deterrence approach prescribes reducing ignorance about the adversary's priorities and decision-making to the greatest possible extent. As Elaine Bunn has observed, the threat of economic or diplomatic sanctions or war crimes prosecution may affect the choices of some decision-makers.<sup>11</sup> Tailored deterrence involves a holistic approach to the means that may sway an adversary's choices, with due attention to a full spectrum of capabilities. In Payne's words,

> In some cases, non-military approaches to deterrence may deter best, in others, non-nuclear force options may be adequate and advantageous, in still other cases, nuclear threat options may be necessary to deter. Each type of capability is likely to have a role in deterring attacks; to reject any as unnecessary for deterrence is to presume knowledge about how foreign leaders will think and how deterrence will function across place and time that is wholly unsupportable.<sup>12</sup>

It bears repeating that no guarantee can be offered for the success of any deterrence posture, even one based on superior nuclear forces. As Payne has pointed out,

> Some future foes may indeed be deterred by very modest U.S. nuclear capabilities, or by none at all. Others, highly motivated and cost/risk tolerant, may be deterrable only by severe nuclear threats involving robust capabilities. And, in some cases, policies of deterrence simply may not be applicable at any level of nuclear capability. 13

Knowledge of the priorities and decision-making behaviour of specific adversaries may nonetheless improve the chances of successfully deterring aggression.

The tailored deterrence approach differs from the Cold War outlook because it considers multiple distinct adversaries instead of focusing on a single main adversary, the Soviet Union. It shifts attention away from

<sup>&</sup>lt;sup>11</sup> *Ibid.*, p. 6.

<sup>&</sup>lt;sup>12</sup> Keith Payne, Testimony before the House Armed Services Committee, Subcommittee on Strategic Forces, 18 July 2007, p. 3; emphasis in original.

<sup>13</sup> Payne, The Fallacies of Cold War Deterrence and a New Direction, p. 191.

abstract models of what NATO governments would find deterring — such as the threat of nuclear war — to an analysis of what specific adversaries might find credible and deterring in particular contexts. As noted above, the tailored deterrence approach calls for studying, among other things, the behavior, strategies, decision-making, and interests of each specific opponent — above all, the interests as the opponent defines them. The United States and its allies may then determine what particular adversaries value most highly, and therefore what might be held at risk in pursuit of deterrence, war-prevention, and crisis management.

In short, tailored deterrence calls for understanding the specific adversary, assembling an array of pertinent threats and incentives, and communicating messages that may, it is hoped, convince him not to attempt an act of aggression or coercion. In other words, the "tailored deterrence" concept may offer a pathway to investigating what the United States and its NATO allies can do to improve their deterrence postures and adjust them to the requirements of specific contingencies involving particular adversaries.

# Intrinsic obstacles to success in implementing the "tailored deterrence" concept

What are the intrinsic obstacles to success in implementing the concept of tailored deterrence?

The first problem is that "tailored deterrence" may not be feasible because of the great challenge of correctly understanding the specific adversary. Most state adversaries are not simple unitary actors but collections of agencies and power centers. As a workshop participant pointed out, the outcome of their future interactions in a specific crisis "may be a mystery, not a secret."

Moreover, some workshop participants argued that "true believers" convinced of their ideology and historical destiny are not subject to deterrence, however elaborate and seemingly astute the deterrence postures designed to fit them. Napoleon, Hitler, and Ahmadinejad were cited as examples. However, other participants disagreed, and held that every-

one must fear something — for instance, operational defeat or setbacks for their cause.

Some workshop participants found the concept of tailored deterrence meritorious and gave examples of success. Some participants said that perhaps the clearest successes for "tailored deterrence" were the U.S. and coalition warnings to lower-level commanders in the Iraqi military — sometimes called "trigger-pullers" — that they would be held personally responsible for any use of weapons of mass destruction (WMD). These warnings were highly specific and "tailored" to the situation; and they appear to have influenced the decision-making of individual Iraqi commanders in 1991.

Workshop participants disagreed about assessing cultural issues in deterrence. Some participants argued that a nation's strategic culture does not determine its choices but influences its approach to security challenges. Knowledge of an adversary's strategic culture may therefore enable one to define a deterrence posture with a greater likelihood of success. For example, one participant said, Iran seems not to care about threats of punishment and to be indifferent to offers of rewards. If this is indeed a fundamental finding about Iran's strategic culture, he argued, it implies that the only deterrence strategy that might work against Tehran would be deterrence by denial. That is, Iran would be most effectively deterred by threats of defeat in military operations. This could be seen as an argument for missile defenses to protect NATO forces, territory, and population centers.

Some workshop participants nonetheless expressed caution about "strategic culture" approaches and noted that some questions about this analytical approach have yet to be fully answered — for instance, the problems of formulating and testing hypotheses with precision, making reliable forecasts, accounting for changes in strategic culture, and distinguishing strategic culture from other causative factors, such as perceived national interests and resource constraints. Moreover, some participants questioned the extent to which strategic culture is a policy determinant in cases in

which power is highly concentrated in a single person, such as Saddam Hussein in Iraq and Kim Jong II in North Korea. Other participants replied that, while "the psychosis of a single person" at the top may indeed be relevant in decision-making, that person must nonetheless act within a framework of cultural tendencies built up throughout the history of a society.

Another problem in deterrence is communication. Some messages are sent by actions and capability acquisition and well-publicized exercises, while others are expressed in words. As far as messages formulated in words are concerned, how can governments know that their deterrence warnings have been heard by the right recipients and interpreted as intended? How can they tailor their messages to maximize prospects for successful communication? What channels in addition to public declarations of policy might be employed? Given the fact that there may be competing agencies and power centers in a particular government, how can one formulate a message that will not be subject to distortion, misunderstanding, and differences in interpretation?

Skeptics about tailored deterrence have pointed out that even the successful communication of a message "tailored" to a specific rational recipient and intended to have a deterrent effect may not have the desired result. For example, in 1967 Israel warned the King of Jordan that in going to war he would lose Jerusalem and the West Bank. King Hussein received and understood the message, but he evidently regarded these penalties of action as less grave than the risks of inaction for his regime and his life.

Efforts to communicate deterrent messages may have complex and unexpected consequences. The message may be received by multiple parties in addition to the intended recipient, including other adversaries and domestic publics in NATO nations. The message may therefore provoke unanticipated and counterproductive reactions. Some adversaries might try to exploit the message to send countervailing messages — that is, warnings of possible responses — to public opinion in NATO nations; and this might in some circumstances make it more difficult for NATO governments to uphold their deterrence policies. Moreover, if the Alliance's

threats are not acceptable to public opinion in NATO countries, they will lack credibility; and the effectiveness of the deterrence threat will be correspondingly diminished.

Some observers have cited the case of Russian reactions to U.S. missile defense plans as an example of the "multiple recipient problem." Moscow's strong opposition to the proposed deployment of U.S. missile defense system elements in Poland and the Czech Republic may constitute an example of an unexpected and unhelpful reaction by one power (Russia) to an action directed against another (Iran). Indeed, Russia has succeeded in convincing some observers in NATO nations and elsewhere that the projected missile defense deployment might lead to an "arms race." The Bucharest Summit Declaration confirms that the Allies have nonetheless agreed to support moving forward with this effort.<sup>14</sup>

Another aspect of the "multiple recipient problem" is that an adversary's government may be far from monolithic. As suggested above, it may consist of competing power centers that communicate poorly with each other. The April 2001 U.S.-Chinese EP3 incident may, for example, have demonstrated that China's government lacked the institutional unity required for effective crisis management. If its communications systems were disabled, such a government would have even greater difficulty in reaching decisions and controlling its forces, with potentially adverse implications for deterrence.

Some workshop participants underscored the importance of strategic communication and information operations, and argued that such operations should not be seen as a support function but as a fundamental element of the overall mission. A participant quoted David

<sup>&</sup>lt;sup>14</sup> "Ballistic missile proliferation poses an increasing threat to Allies' forces, territory and populations. Missile defence forms part of a broader response to counter this threat. We therefore recognise the substantial contribution to the protection of Allies from long-range ballistic missiles to be provided by the planned deployment of European-based United States missile defence assets. We are exploring ways to link this capability with current NATO missile defence efforts as a way to ensure that it would be an integral part of any future NATO-wide missile defence architecture." North Atlantic Council, Bucharest Summit Declaration, 3 April 2008, par. 37.

Kilcullen, the author of *Countering the Terrorist Mentality* and other works, in this regard: "We typically design physical operations first, then craft supporting information operations to explain our actions. This is the reverse of al-Qaida's approach. For all our professionalism, compared to the enemy's, our public information is an afterthought. In military terms, for al-Qaida the 'main effort' is information; for us, information is a 'supporting effort."

A final problem that deserves more attention is determining capabilities requirements. Since deterrence requirements will depend on specific adversaries in particular contingencies, the United States and its NATO Allies may need "portfolios" or "suites" of capabilities adaptable to a wide array of potential adversaries and contingencies. Political and financial constraints will bound the procurement of new capabilities, however. As a result, comprehensive sets of capabilities will not be available in practice, even for the United States. The Alliance's deterrence posture will therefore depend mainly on forces in being that might be augmented by adaptable prototypes. If the scientific and industrial infrastructures of the United States and other NATO nations could be made more responsive than they are today, a workshop participant said, their capacity to transform virtual system concepts into operational assets to augment forces in being might reinforce deterrence.

The tendency to rely more on non-nuclear capabilities for deterrence is significant in light of the U.S. and NATO tendency during the Cold War to depend heavily on nuclear forces for deterrence. While nuclear forces have historically backed up deterrence by threats of punishment, non-nuclear capabilities are likely to be more useful for deterrence by denial — that is, deterrence by credibly degrading the enemy's prospects of conducting a successful attack. According to one participant, the historical record is "not encouraging" with regard to the effective use of non-nuclear capabilities for deterrence by threat of punishment. This

<sup>&</sup>lt;sup>15</sup> David J. Kilcullen, "New Paradigms for 21st Century Conflict," *eJournal USA*, Vol. 12 (May 2007): pp. 40-46, available at http://usinfo.state.gov/journals/itps/0507/ijpe/kilcullen.htm.

may change, some participants argued, with new types of non-nuclear capabilities, including non-kinetic cyber warfare assets and novel conventional means, such as the proposed Prompt Global Strike system.

A participant drew a contrast between the positive impression of NATO's conventional force transformation efforts conveyed by the Bucharest Summit Declaration and the more critical assessment offered by General Klaus Naumann, the former Chairman of the NATO Military Committee, and other retired general officers in a recent report. The essence of the "Naumann report" is that, while the non-nuclear capabilities of the United States and its allies are significant, they are not optimal for meeting future deterrence and operational requirements. Greater conventional force development investments within NATO and the European Union are therefore required.

Some workshop participants argued that, in addition to deterrence by denial and deterrence by threat of punishment, NATO governments should give greater attention to what one called "reward deterrence." The general principle of inducing restraint by highlighting the positive consequences of inaction has long been part of deterrence, one participant noted. In this sense, the deterring power has been offering the "deterree" a reward — that is, in return for restraint, no punishment and no defeat in the field. Setting up a relationship of rewards that could be withdrawn as a form of leverage would go beyond refraining from punishment and military counter-action. The United States has, for example, offered oil supplies and other rewards to Pyongyang in an attempt to deter the North Koreans from violating their nonproliferation commitments. Elements of Russian energy policy may also constitute a form of "tailored reward deterrence," a workshop participant observed. If Moscow could use Gazprom and other suppliers to promote a situation of dependence on the part of key NATO European countries, the Russian government might be able to deter them from opposing Russian aspirations by subtly threaten-

<sup>&</sup>lt;sup>16</sup> General Klaus Naumann, General John Shalikashvili, Field Marshal The Lord Inge, Admiral Jacques Lanxade, and General Henk van den Breemen, *Towards a Grand Strategy in an Uncertain World: Renewing Transatlantic Partnership* (Lunteren, The Netherlands: Noaber Foundation, 2007).

ing to withdraw the "reward" of reliable energy supplies.<sup>17</sup>

One of the skeptics about tailored deterrence at a workshop hypothesized that "precisely tailored" capabilities may be unnecessary for deterrence. Some adversaries should be deterred, he argued, by "the totality" of NATO's political, military, and economic assets. From this perspective, "the generalized power of the Alliance" should in itself be the major source of deterrence.

# Specific problems for NATO in maintaining and modernizing its deterrence posture

The discussion above does not exhaust the general problems with implementing tailored deterrence, but it is also pertinent to consider the specific problems for NATO in maintaining and modernizing its deterrence posture. These problems are not only raised by tailored deterrence, but by any kind of deterrence posture. All deterrence postures involve defining declaratory and action policies, and acquiring and exercising capabilities.

If it is difficult for national governments — including the United States — acting alone to succeed in obtaining the deterrence effects they seek, how much greater are the problems of doing this in a 26-nation Alliance? Some participants in the 2007-2008 workshops said that it would be "extremely difficult" for the North Atlantic Council to define and manage a strategy of tailored deterrence because of the differing inter-

<sup>&</sup>lt;sup>17</sup> The possibility that the "tailored deterrence" concept could be turned against NATO Allies in some circumstances — for instance, by adversaries attempting to deter Allies from intervening in regional conflicts — received little attention in the workshops.

<sup>&</sup>lt;sup>18</sup> The number of NATO Allies may be expected to continue to increase. At the April 2008 Bucharest Summit the Allies announced that they had decided to invite Albania and Croatia to begin accession talks, to extend such an invitation to the former Yugoslav Republic of Macedonia as soon as this country and Greece reach "a mutually acceptable resolution to the name issue," and to invite Bosnia and Herzegovina and Montenegro "to begin an Intensified Dialogue on the full range of political, military, financial, and security issues relating to their aspirations to membership, without prejudice to any eventual Alliance decision." Moreover, the NATO heads of state and government declared, "We agreed today that these countries [Georgia and Ukraine] will become members of NATO." North Atlantic Council, Bucharest Summit Declaration, 3 April 2008, par. 2, 19-25.

ests and viewpoints of the 26 Allies. One participant called this the challenge of organizing "collective actor deterrence." It is hard, he said, to get the component nations of a collective actor to agree on the seriousness of a threat and the proper response, and then to send a coherent message and act in a coordinated fashion.

The first challenge for the NATO Allies in pursuing "tailored deterrence" would indeed be to reach a firm consensus on who their adversaries are, what actions the Allies are trying to deter, and what penalties they are prepared to impose. It was noted, for example, that the United States has declared Hezbollah a terrorist organization, whereas the European Union has not. At present, some participants observed, the Alliance is divided in its definition of security challenges, with — for example — threat assessments in Baltic Europe sharply at variance with those in southern Europe.

The concept of tailored deterrence calls for specificity in identifying potential threats. However, in the post-Soviet period the NATO Allies have justified their deterrence posture — particularly its nuclear elements — as a general insurance policy against various unspecified threats. While the Allies have been willing to express concern about abstract threat categories — terrorists and WMD proliferants — they have been reluctant to name specific countries as potential threats, at least in public documents. No tailoring to specific potential adversaries will be possible in NATO declaratory policy as long as this reticence persists. As a result, a workshop participant concluded, "constructive ambiguity" may gain greater support than tailored deterrence. Ambiguity may be preferred because, a participant observed, "it avoids the problem of sending messages that might be misunderstood by multiple recipients and/or irritate one's own populations." One participant said that the public is not wellinformed partly because of the dynamics of getting 26 Allies to agree on a public statement. The operative maxim, he said, is "stay clear of too clear a message." The result is ambiguous "lowest common denominator" wording, as in the vague and flexible principles of the Alliance's 1999 Strategic Concept.

Vagueness in declaratory policy need not, however, be an insurmountable obstacle to tailored deterrence. As some participants pointed out, there may be no need to name names for an adversary to understand that he is the object of a particular deterrent policy. This may be especially true in a complex, long-standing relationship between two parties that find it in their interests to cooperate in a number of ways but still retain an element of mutual distrust — as with the relationships between China and the United States, and between Russia and the United States.

Aside from obstacles to tailored deterrence in formulating declaratory policy, some conference participants noted, the NATO Allies would also have to surmount internal sensitivities about acquiring and improving their capabilities. For example, some Allies may be reluctant to obtain and employ counterinsurgency and other "deterrence by denial" capabilities suitable for combat operations that would enhance the Alliance's overall deterrence posture. To a considerable extent, capability acquisition and doctrinal development in NATO have been tailored to fit political requirements internal to the Alliance rather than to deter and counter external threats. Moreover, the Alliance's procurement processes have historically been ponderous. As a participant said, "Don't look to NATO to do fast acquisition." A participant ventured the judgement that — in the absence of external threats that would compel cooperation — coalitions of the willing within the Alliance might be more effective at developing tailored deterrence strategies than NATO as a whole.

What have past operations done for the Alliance's deterrence credibility? Some workshop participants said that the widely publicized disagreements among the Allies about targeting specific bridges and other sites during Operation Allied Force in the 1999 Kosovo conflict may not have set a positive precedent or sent an effective deterrence signal for the future. In the current demanding operations in Afghanistan specific Allies have established various "caveats" on the usability of their forces. Some workshop participants said that the Alliance might be hampered in articulating a clear deterrent message by the publicly acknowledged caveats in current operations, as in Afghanistan. More broadly, a workshop partici-

pant noted, NATO is shaping its reputation in the combat and struggle to establish security in Afghanistan. If the Alliance failed to meet its objectives in Afghanistan, he noted, that could undermine its capacity for deterrence — at least in relation to some types of threats — and this could damage its ability to extend assurances to security partners. Conversely, effective stabilization and counterinsurgency operations could contribute to successful deterrence in the future.

Another participant pursued the "actions speak louder than words" theme by noting that nuclear proliferants probably derive impressions about acceptable boundaries from the treatment received by their counterparts. The participant noted that in 1994 the U.S. "red line" for North Korea was the production of fissile materials. After North Korea crossed this "red line," new "red lines" emerged concerning the production and testing of nuclear weapons. After the North Korean nuclear explosive test in October 2006, the new "red line" became the transfer of nuclear weapons. Other participants, however, noted that proliferants might draw incorrect conclusions from such a sequence of events, because responses to particular cases may differ.

Maintaining cohesion and staying power in a crisis constitute another issue. Some workshop participants drew attention to the possible reluctance of some Allies (a) to follow through with implementing NATO's threats in a crisis and (b) to persevere in a strategy if it did not produce prompt results. Given the vagaries of the domestic political processes in each Allied nation, one participant asked, to what extent could the Alliance muster the political will to establish "red lines" that would not be washed away as if they were painted with water colors? The Alliance's deterrence posture would be ill-served if the Allies were seen as divided in a crisis, with some unwilling to accept costs and casualties.

Another challenge for NATO is that, since the early 1990s, the Allies have sought not only to be prepared to deter aggression or coercion against the Alliance but also to intervene in peace enforcement and peace-keeping operations beyond their territory. As a result, some workshop par-

ticipants suggested, NATO might be well-advised to devote attention to Timothy Crawford's concept of "pivotal deterrence." Pivotal deterrence differs from "direct" (or "central") deterrence and "extended" deterrence in that its focus is not on deterring attack against oneself or one's allies but on deterring two third parties from engaging in conflict with each other. In theory, a major power's ability to align with either of the third parties might be exploited to deter them from fighting each other. The concept is relevant to NATO in that the Allies have tried unsuccessfully, notably in the Balkans, to deter local antagonists from engaging in combat and have been obliged to use force in order to separate belligerents and promote conflict resolution. The question is the extent to which the "tailored deterrence" concept could be applied in such cases.

The major challenges with the "tailored deterrence" approach, one participant noted, include not only gathering and analyzing intelligence about specific adversaries but also getting NATO governments to use the intelligence. Because the available facts may be consistent with different models of the adversary's motivations and decision-making, a government should ideally maintain "multiple models of what is possibly the case" and be open to modifying them, if necessary, on the basis of new information. This would be difficult to do on a national basis, and all the more so in an Alliance of 26 nations. Debate and negotiations in the Alliance about modifying its deterrence posture in light of new intelligence assessments could lead to counterproductive controversy, "posturing" about the right posture, and a loss of cohesion at a time when the Allies may well need political will to take risks and make sacrifices.

The significant political constraints on defining tailored deterrence policies in a 26-member Alliance may be compounded by the public's low level of awareness of security issues. Most participants in the workshops agreed that nuclear capabilities are still an essential element in

<sup>&</sup>lt;sup>19</sup> Timothy W. Crawford, Pivotal Deterrence: Third-party Statecraft and the Pursuit of Peace (Ithaca, New York: Cornell University Press, 2003).

<sup>&</sup>lt;sup>20</sup> Timothy W. Crawford, "Pivotal Deterrence and the Kosovo War: Why the Holbrooke Agreement Failed," *Political Science Quarterly*, 116 (Winter 2001-2002): 499-523.

the Alliance's deterrence posture, but several said that the public's limited knowledge of NATO's deterrence requirements could affect the prospects for sustaining the capabilities maintained in the Alliance's nuclear risk-and responsibility-sharing arrangements in Europe.

Many workshop participants agreed on the importance of maintaining and modernizing these capabilities, which constitute an essential element of Alliance solidarity and political cohesion. However, several workshop participants concluded, these capabilities can only be sustained and modernized if key Allies show leadership and make the case for their continued relevance. Several participants highlighted the following questions as critical for future Alliance policy: How can the Alliance maintain and improve its nuclear risk- and responsibility-sharing arrangements? What new forms of sharing in the nuclear domain would be substantive and advantageous?

Some participants raised the question of satisfying competing imperatives: showing political commitment to nuclear disarmament and maintaining nuclear deterrence capabilities. As one participant put it, "Can we square modernization with disarmament?" More broadly, the issue might be formulated as follows: how can the Alliance reconcile (a) the need to pursue visible and substantive measures in the domain of arms control, nonproliferation, and disarmament and (b) the requirement to maintain and modernize its arrangements for extended deterrence? One participant said that the solution might be to stress that nuclear deterrence is an interim security stewardship responsibility, pending the organization of measures that would permit nuclear disarmament. Another participant said that it would be "very, very difficult for any government in Germany" to pursue such nuclear modernization without a concurrent effort to enhance the NPT regime and pursue nuclear disarmament.

### Why NATO can rise to the challenge

To say something is difficult is not the same as saying that it is impossible. There are grounds to hold that NATO can rise to the challenge of tailored deterrence.

Each of the points just made can be seen in another light. The NATO Allies found plenty to disagree about in their threat assessments even when their main adversary was the Soviet Union. Even after they agreed on the Harmel Report in 1967, they quarreled and distrusted each other about détente, Ostpolitik, and arms control through the 1970s and 1980s. They nonetheless managed to maintain enough cohesion to keep the Alliance together and out-last the Soviet bloc.

The preference for ambiguity over specificity goes back to the very beginning of the Alliance as well. When the Allies were drawing up the first Strategic Concept for the Defense of the North Atlantic Area in 1949, the government of Denmark proposed deleting the specific reference to "the atomic bomb," and the Allies agreed on a vague compromise formula whereby the Alliance would "insure the ability to carry out strategic bombing promptly by all means possible with all types of weapons, without exception."<sup>21</sup>

The sensitivities about developing and deploying certain types of capabilities — and caveats in operations — have been present throughout the history of the Alliance as well. Norway and Denmark have, for example, from the beginning of the Alliance maintained a policy of not hosting nuclear weapons or foreign military forces on a standing basis on their soil. Caveats in operations have been visible since the Alliance first began no-fly-zone and embargo enforcement operations in 1992 in the Balkans, and the only reason little was heard about operational caveats during the Cold War was that — fortunately — the East-West standoff never became a shooting war in Europe.

As for cohesion and staying power in crises, the Alliance was tested over and over again during the Cold War — the Berlin crises, the Suez crisis, the Cuban missile crisis, the INF missile crisis, and so on — and it

<sup>&</sup>lt;sup>21</sup> Minutes of the Defence Committee, 2nd meeting, 1 December 1949, item 8, quoted in Gregory Pedlow, "The Evolution of NATO Strategy, 1949-1969," in Gregory W. Pedlow, ed., *NATO Strategy Documents 1949-1969* (Brussels: NATO Information Service, 1997), p. xiii.

was tested by the Balkan crises through the 1990s. The Allies can muster the political will to withstand future tests if they choose to do so, and it will clearly be in their long-term interests to stick together.

As for the low level of public awareness and informed support, Allied governments have always had to deal with this constraint in pursuing the political "art of the possible" — as with the need to reconcile the competing imperatives of force modernization and arms control. It is worth recalling that the Allies have been dealing with arms control initiatives and regimes since the 1950s. Long before the 1967 Harmel Report, the Allies had made clear their support for a "dual track" approach of affirming an interest in positive political relations and negotiated solutions as well as a determination to defend Allied security interests. The epitome of pursuing both tracks at once was, of course, the 1979 dual-track decision on intermediate-range missiles. The Allies have so far managed to reach a series of constructive agreements and to maintain the Alliance's defense posture, and they can do so in the future if they rally political will and determination, and marshal the necessary resources.

The workshops confirmed the relevance of the questions raised by the "tailored deterrence" concept, and the complexity and difficulty of answering these questions.

There may not always be a role for deterrence — that is, some adversaries may not be deterrable. However, if deterrence is to be effective, it will have to be tailored to some extent. Moreover, there are not many alternatives to re-thinking deterrence. The Alliance is likely to face multiple adversaries in the coming years, and each will be unique in some ways.

The challenge for the Allies is to critically examine their thinking about what deters and how to prevent aggression and coercion. The alternative could be the use of force, if Alliance security interests are to be protected. Successful deterrence and war-prevention are obviously preferable to having to deal with the consequences of a failure of deterrence.

### EVALUATING TAILORED DETERRENCE

### Patrick M. MORGAN\*

By way of introduction, in this paper I treat deterrence and compellence as overlapping so that "deterrence" reflects either or both. Distinguishing them in the abstract is important because at that level compellence is clearly harder to achieve - the trouble is that there is no reliable way to determine which role the opponent sees himself playing. In addition, I treat deterrence as generally encompassing the broader "dissuasion" that advocates of tailored deterrence cite. This dilutes the concept of deterrence or partly overlaps it with other forms of influence on decision making, but I have stayed within the broad terms of reference supplied.

### **Background**

A discussion about tailored deterrence (TD) should start by noting that the idea behind it is hardly new. TD derives from the notion that deterrence (or the broader "dissuasion") should fit the nature, perceptions and concerns of the opponent.

This is familiar in conflict analysis. In strategy, a central theme is that understanding the enemy is vital. A fundamental maxim for success in guerrilla warfare (for either side) is to understand the opponent and the populace that will likely determine the outcome. In studies of negotiations various analysts assert that understanding the opponent is the first step toward success. In the same way, TD is said to require knowing the opponent and designing ways to contain and channel his decisions accordingly.

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The idea is not new in the study of deterrence. During the 1970s and 1980s, for instance, one school of thought asserted that since the Soviets sought to be prepared to fight and win even a nuclear war, having that capability was what would most impress and deter them. In other words, this school held, deterrence required a war-fighting, war-winning ("prevailing") capability at every level. Among theorists, Alexander George was an early proponent of the tailoring of deterrence and continued to press this view in some of his last writings. This included suggestions that greater attention be given to non-deterrence forms of influence. Others, including many critics of deterrence, have done the same over the years.

TD resembles various versions of the Flexible Response (FR) approach during the Cold War, except that FR envisioned tailoring not to opponents but to the *level and nature of the conflict*. It called for capabilities to fight at any level to deter attacks at any level, lest deterrence have to rest ultimately on threatening escalation to a larger, even nuclear, war, a threat difficult to make assuredly credible. The FR similarities to TD include some parallel criticisms being generated. It was said that FR could readily result in a controlled low-level, yet costly and destructive war, and that it would be too costly and complicated, requiring weapons, forces, plans, and training for all sorts of contingencies.

Tailored deterrence embodies little in the way of new concepts of deterrence. The standard deterrence relationship or situation envisioned is still a dyadic clash between challenger and defender, shaped by rationality, with the standard things deemed necessary for effectiveness and considerable concern about deterrence stability and credibility. The underlying theory is the same. There is no new thinking about how limited rationality or irrationality helps or hurts the actors, no differentiating patterns of

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<sup>&</sup>lt;sup>1</sup> Alexander George, "The Need for Influence Theory and Actor-Specific Behavior Models of Adversaries," in Barry R. Schneider and Jerrold M. Post, eds., *Know Thy Enemy: Profiles of Adversary Leaders and Their Strategic Cultures* (Maxwell Air Force Base, Alabama: United States Air Force Counterproliferation Center, November 2002), pp. 271-310. He cites prior works in which he advocated tailoring coercive activities.

irrationality in their impact on deterrence credibility, stability, and success. TD does reflect a heightened appreciation of combining coercive threats with other kinds of influence, but offers no conceptual and analytical refinements on when and how to do this. It gives appropriate attention to *general deterrence*, in seeking to defeat not just challenges to American dominance but to forestall their emergence. But it lacks a refined conception of contemporary general deterrence, particularly for promoting actor internalization of peace-promoting norms.<sup>2</sup>

Many "new" concerns cited by TD proponents are also familiar. Worry about "crazy states" goes back decades.<sup>3</sup> Fear of losing deterrence credibility with opponents who acquire weapons of mass destruction (WMD) is a classic problem. The superpowers grasped the dangers posed by unstable states relatively early in the Cold War. TD discussions often highlight the stability-instability paradox (i.e., a nuclear-armed Iran may wreak havoc at low levels of conflict), first discussed in the 1950s.<sup>4</sup> TD is ultimately a reflection of the U.S. Department of Defense's preoccupation with international system management via deterrence arrangements, which is the continuation of a central Cold War concern. Much of the academic work now concerns traditional problems: the utility of assuming rationality; the impact of prior behavior on one's deterrence credibility; the complications and credibility of extended deterrence; and the difficulties posed by states or regimes that seem especially risk-averse.

The most important change leading to a TD approach is the Bush Administration's expansion of a continuing American retreat from the main components and dominant conception of stable deterrence during the Cold War:

<sup>2</sup> On general deterrence, see Patrick M. Morgan, *Deterrence Now*, Cambridge: Cambridge University Press, 2003, particularly chapter 3

<sup>&</sup>lt;sup>3</sup> See, for example, Yehezkel Dror, *Crazy States: A Counterconventional Strategic Problem*, Lexington, MA: D.C. Heath and Co. 1971.

<sup>&</sup>lt;sup>4</sup> See Glenn Snyder, "The Balance of Power and the Balance of Terror," in Paul Seabury, ed., *The Balance of Power*, San Francisco: Chandler, 1965. A standard criticism of Massive Retaliation in the 1950s was that it could not mount the credibility needed to deter lesser provocations, such as the Korean War, by the communist world.

- treating mutual nuclear deterrence as ultimately stable (preventing war) and tolerable;
- generally excluding nuclear weapons as significant war-fighting resources;
- considering first-strike and national missile defense capabilities destabilizing;
- maintaining very large conventional forces and elaborate arms control agreements to help maintain stability and escalation control; and
  - considering multilateral security regimes very important.

Mutual nuclear deterrence was, with minor exceptions, never treated as ideal; during the Cold War it was taken as stable and tolerable because it was the only plausible arrangement politically, and because escaping from it militarily would not work, had huge costs, and could be destabilizing. The end of the Cold War political conflict permitted a retreat from keeping many nuclear weapons on high alert, elaborate targeting of deployed missiles, and intense suspicion about every move by Russia and China. It also stimulated an American move toward unilateral deterrence of current (rogue states) or potential (China) serious opponents. Being very vulnerable to opponents' forces was no longer tolerable. This exploited not only the thawing of relations with the Russians and the Chinese but the deterioration of their strategic nuclear forces and Russian conventional forces, especially alongside the huge improvements in American forces associated with the Revolution in Military Affairs.

The Bush Administration moved significantly further down this road. A familiar concern that deterrence might fail against an irrational opponent was now applied to a category of states; facing an irrational opponent was depicted as more plausible. Prior administrations were committed to discouraging or outpacing the emergence of a "near peer" competitor, avoiding new MAD relationships, and blocking any rogue state capabilities for deterrence/compellence, i.e. WMD. The Bush Administration added that the US would consider preemptive attacks as part of its deterrence strategy, then conducted such an attack, and would not rule out others against Iran and North Korea.

The US always avoided a no-first-use policy on nuclear weapons, but earlier plans for readily using them to fight wars had been deemphasized, and just prior to and after the end of the Cold War most of the weapons involved were taken off deployment. The Bush Administration sought, with little success, to give the possible use of nuclear weapons more prominence:

- by seeking support for developing new nuclear weapons and broadening nuclear weapons missions;
  - by seeking support for a new nuclear weapons pit facility; and
- by seeking to build up the infrastructure for a more rapid return to nuclear testing if necessary, and making this one leg of a new strategic triad.

Prior administrations had continued research and development on national missile defense but avoided deployment because of continuing concern about whether it would work, the costs involved, and the controversy over abandoning the idea that missile defense could be destabilizing. The Bush Administration crossed a major threshold by setting a date for deployment on coming into office and by abandoning the ABM Treaty in its first year.

The emphasis on TD for a richer, more flexible, and more precise menu of types of capabilities - with more variations of their employment - was very much in keeping with the vigorous pursuit in the Pentagon on greater mobility and flexibility in American conventional forces, and the effort to move toward creation of more modern, precise, and flexible nuclear forces.

Another important political shift predates the Bush administration. The US is not approaching global and regional security management as a status-quo-oriented hegemon. It is, instead, pursuing foreign policy goals that envision major *domestic* changes in many states and societies as a prerequisite to major shifts in their foreign affairs orientations - in part as an extension of democratic peace theory. It is a revolutionary state in important respects, leading many governments to see American security policy as more compellent than deterrent in orientation.

Another contextual factor has changed as well. The willingness of the United States, and its friends, to rest deterrence ultimately on threats to impose very considerable nondiscriminatory death and destruction, at any level of conflict, has declined sharply. Compared with the Cold War era this reflects a great narrowing of what we are prepared to inflict. Logically this generates efforts to develop deterrence threats that promise far more discrete and precise effects. (A version of this problem arose during the Cold War and led to a roughly similar response.) Hence an important underlying motive for tailoring is to make threats or their implementation more acceptable to Americans or third parties. The standard as to what is acceptable has shifted as the rise of liberal values in the post-Cold War era has elevated concern about harm to noncombatants, economic resources, cultural centers, etc. It has also shifted to match the decline in what is visibly at stake in the conflicts the US is pursuing today. In comparison with the Cold War the stakes seem so much lower, thus far, that fear and hatred of the opponents arenot great enough for discarding such considerations, as was done with Cold War era deterrence.

Hence another new element associated with TD, one that enhances its feasibility, is the much greater precision in using force due to the Revolution in Military Affairs and the resulting Military Transformation of US forces. Various analyses of these largely technological and organizational developments emphasize that ultimately a new strategic conception is needed to make full use of them for revolutionizing warfare. TD is apparently an effort to develop such a conception, based on those developments, for deterrence as well. As suggested above, it falls well short of this thus far.

A related innovative element in TD is a Global Strike orientation and capability and therefore assignment of the major responsibility for deterrence and dissuasion to the U.S. Strategic Command (STRATCOM). Since the goal is a national strategy that weaves together not only military but political/diplomatic, informational, and economic resources, the responsibility should be lodged at the White House, particularly since the responsibility for directing national intelligence capabilities is now there. Global Strike draws on a) turning some US strategic forces into conven-

tional forces with strategic range and accuracy, b) developing nuclear weapons for very precise missions, and c) using Special Operations Forces for strategic purposes. All this is new or an upgrade of recent practices. Also new is seeing cyberwar elements as "nonkinetic" warfighting capabilities that bolster deterrence.

The shift in the broad political context for deterrence and other potently persuasive efforts is important. For one thing, it contributes to eroding standard, previously important, distinctions:

- between challenger and defender: many targets of American deterrence now feel more like defenders themselves, and are more likely to be seen as such by third parties;
- between deterrence and compellence: the US is in part trying to compel certain governments to give up the capability and the right to deter attacks by the US;
- between deterrence and preventive attack: the US now wants to treat various actions by others that are far from using force as attacks;
- between deterrence and BMD: the US wants missile defense not just to defend, but to dissuade others from seeking missile-delivered nuclear weapons.

This also has an important bearing on the balance of motivation, the critical factor in many deterrence situations. Typically that balance is said to reflect the parties' relative willingness to fight, to bear high costs in that fighting, and to fight at length. It is said to represent the political and other goals the parties believe the conflict is about. What this concept of the "balance" does not capture today is willingness to kill indiscriminately in the conflict, plus willingness to put one's own people (noncombatants) at risk (such as by deliberately hiding among them), and willingness to die in suicidal activities. None of these is a specific reflection of the willingness to fight, bear high costs, and fight at length – the US has displayed those to a substantial degree. What it has not displayed are the latter three.

Finally, a glance at the history of modern American deterrence can call attention to one other change that TD represents. Tailoring is designed to make the use of force more acceptable, but this will do little to resolve the problem that has made deterrence seem less reliable now. Being unable to offer a massive, indiscriminate threat of the sort that seems to have worked during the Cold War, TD will not make deterrence work readily and consistently. As for suicide-oriented terrorists, TD also will do little to deal with such so-called "non-deterrable" actors other than to encourage careful study to see if they are, in fact, impossible to deter.

To see what TD is up against, let us recall that in the past deterrence was often employed in part because it was so difficult to understand the opponent. Thus deterrence rose to prominence in the Cold War in part because, in theory and practice, nuclear weapons and huge conventional forces seemed to mean that *it did not have to be tailored* and this compensated for the difficulties and complexities of understanding opponents. Deterrence *simplified* the problem of trying to understand how to influence an opponent's decision making. The theory simplified by assuming rationality. And opponents' motivations were often deemed intrinsic, basic to human beings or states. A later claim was that suitably awful capabilities had existential deterrence credibility - just the possibility they might be used supplied deterrence, and thus simplified things.

Cold War deterrence carried this further. The vast nuclear (and other WMD) arsenals made it easy to see the ultimate stakes. A precise answer to the question of "how much is enough?" was unnecessary. Vast overkill capabilities discouraged confidence in any supposed first strike capability. Widespread rhetoric about the future of mankind and the international system being on the line made deterrence the key to survival, so it was given enormous emphasis while alternative measures (negotiations, détente, etc.) were often displaced or downplayed. Great powers (particularly the US) feared that almost anything could undermine deterrence credibility, so any gain by the other side was routinely taken as very dangerous without learning whether this was true or not. Of course the image of the opponent made anything he did look harmful or suspicious – and assessing his motives and goals looked easy.

### **On Tailoring**

By contrast, tailored deterrence will almost certainly be inordinately complex. To start with, there are several different kinds of tailoring. Elaine Bunn<sup>5</sup> lists the following:

- tailoring the *means* used to specific *actors* (especially each's decision calculus) and conflict *situations*;
- tailoring development of deterrence *capabilities* to current and prospective *opponents* and *conflicts*; and
- tailoring *threats* and other communication to specific *actors and situations*.

Other possibilities she cites, which are highly relevant, include tailoring deterrence to specific US *objectives*, and to what is *morally* acceptable. I think one might also add:

- tailoring capabilities and strategies to what is *politically feasible* in the US, and
- tailoring according to whether it is an immediate or general deterrence situation.

Added to the complexities here are difficulties posed by including nonmilitary approaches and the blending of various approaches. This multiplies the possible combinations of means and agencies, adding considerably to complications in the information needed, learning, decision making, and implementation. For instance, it will be necessary to anticipate how an opponent is likely to react not only to threats but to appearement, persuasion, incentives, or intense bargaining.

There are other choices that need to be made. One can tailor based on the culture, individual leader, decision making group, historical experiences, etc. of opponents - drawing on area studies or personality studies.

<sup>&</sup>lt;sup>5</sup> Elaine Bunn, "Can Deterrence be Tailored?", Strategic Forum No. 225 (January 2007) Institute for National Strategic Studies, National Defense University.

One can also develop extensive typologies of targets based on all sorts of criteria which appear to be relevant. It is possible to develop models based on several different theoretical perspectives, each with different implications for the information to be collected and kinds of studies needed.

Naturally, tailoring for a specific case will pose immense challenges in intelligence and other information collection and analysis, in absorption of the products by decision makers and action agencies, and in effective utilization. Tailored deterrence efforts will require knowing what is the opponent's ultimate decision unit—individual, small group, large group, competing groups, the broad public — as well as the nature of the decision process. Useful will be knowledge about the *character* of the opponent, such as the honesty, reliability, and probity of the decision makers. This will have to include knowing whether the opponent is generally rational and how the opponent handles stress. The US (and NATO) will want to know the opponent's value hierarchy, like the relative emphasis placed on honor, security, prestige, and power. The opponent's perceptions will be important to ascertain: worldview; his estimate of his relative capabilities, his conception of the conflict and his role (Aggrieved party? Challenger? Defender?); his goals and the credibility of his messages. The US will want to know the key indicators that the opponent will use in assessing US communications, intentions, and motivation. As noted above, it will be particularly important to ascertain the strength of the opponent's motivation, as well as his risk tolerance, and whether these are changing and why (A new regime? New leadership? Shifts in national or elite opinion?).

Such knowledge will be needed to judge how threats or other influence efforts are likely to affect the opponent emotionally (Provoke rage? Surprise?) and politically (Harden positions? Induce compromise? Redouble the opponent's motivation?). Knowledge will also be needed about how using threats is likely to shift the decision arena or alter the composition of the decision group, and how any preliminary use of force (versus negotiations, appeasement, or incentives) will change the opponent's feelings, images, and decision making.

Major challenges will arise in trying to answer still other questions:

- When should the US be transparent or ambiguous?
- How should primary messages be sent publicly or privately? By official or unofficial channels? Repeatedly or as a single communication through a select channel?
  - How to read the opponent's responses?
- When and how to use strategies like tit for tat and escalation or de-escalation?

All this is bound to be challenging in view of the many complaints about American intelligence in recent years. Studies show that even in the Cold War American analysts and policy makers regularly lacked conclusive answers to basic questions about the Soviet Union and Soviet decision makers. That is ominous because the extensive intellectual and intelligence burdens of tailored deterrence should be most effectively tackled within an enduring rivalry, when repeated experience with an opponent is combined over time with accumulations of evidence and analysis. Yet we were groping in the dark almost to the end on many aspects of deterring the Soviet Union. The same applied to many other intelligence questions and security policy issues during those decades. The Soviet record was not apparently any better, which is equally disturbing since success in tailoring deterrence depends not only on American perceptions and decision making but also on how accurate and appropriate are opponents' perceptions of it and decisions in response to it.

It will continue to be the case that the necessary information gathering and assessment are complicated by how the detailed information pertinent to a TD operation is always shifting. Governments change, influence inside governments is constantly being redistributed, specific decision makers change, political systems change, motivations shift, and the intensity of motivations changes. There are also always huge informational, cognitive, organizational, and political barriers to doing such learning properly.

## **Further Analysis**

Tailoring deterrence is not a strategy. It is a concept for developing a framework for working out a deterrence strategy. It is a guide on

how to proceed in devising and applying any particular strategy, including how to anticipate the capabilities needed in the possible strategies that might be adopted.

Not to be forgotten is that the US increasingly seeks to pursue deterrence via a multilateral organization or ad hoc group. TD might well complicate those efforts. Unless it can be tightly coordinated among the participating parties, the result is too often going to look like the patchwork of NATO's coercive efforts against Serbia.

A relevant aspect here, and in unilateral deterrence operations, is that the US is often involved in "pivotal deterrence," a subject recently explored in a major study. 6 There are various situations in which the US is interested in deterring two other actors caught up in a serious conflict, an unusual variation on extended deterrence — for example, China and Taiwan, India and Pakistan. A multilateral exercise in pivotal deterrence can pertain to a conflict between states or a civil war within a state. It may be dangerous to convey either indifference among or excessive support for any of the parties, so finding a delicate way to be ambiguous about the deterrer's intentions if fighting breaks out or in delaying any firm commitment is important but bound to be difficult when multiple governments are involved. Typically the deterrer must convey a readiness to act decisively to quell the fighting and a determination to uphold the status quo, not something multilateral actors always do well. Yet Timothy Crawford suggests that in a unipolar system pivotal deterrence probably requires a multilateral effort, regardless of the difficulties involved.

This is just one facet of a rising incidence of *collective actor deterrence* of all sorts. Here deterrence is undertaken by a group of states constituted for, and acting on behalf of, the general welfare of a subregion-

<sup>&</sup>lt;sup>6</sup> Timothy W. Crawford, *Pivotal Deterrence: Third-Party Statecraft and the Pursuit of Peace*, Cornell: Cornell University Press, 2003.

<sup>&</sup>lt;sup>7</sup> For a preliminary discussion see Morgan, *Deterrence Now*, chapter 5. An updated discussion is Patrick M. Morgan, "Collective Actor Deterrence" in Morgan, T. V. Paul, and James Wirtz, eds., *Complex Deterrence*, Chicago: University of Chicago Press, forthcoming.

al, regional, or global system - like the UN Security Council, NATO, or the African Union. This is deterrence for system management or governance, undertaken in civil and international conflicts, proliferation cases, or human rights catastrophes. Studies have often noted the failures of collective actor deterrence and some theoretical analysis is beginning to sort out why. In terms of what deterrence theory suggests is important, collective actors typically fall short in:

- clearly identifying the threat often this is strongly disputed by the members;
- clearly communicating what is demanded because the members disagree;
  - sustaining credibility to back up the demands;
- undertaking deterrence/compellence early enough in a conflict or crisis; and
- establishing that the multilateral actor members have strong interests at stake.

On the other hand, in theory collective actors should be better at gaining legitimacy in the eyes of outside observers (as NATO succeeded in doing while acting illegally in the Kosovo case). They should be far more likely to seriously try noncoercive measures, to effectively convey assurances that compliance will end the threats, and to threaten without setting off classic deterrence instability where a threat incites the other side to attack.

This is why NATO deterrence on behalf of its members was easier than NATO efforts to deter for the benefit of European peace and security as a whole on terrorism, proliferation, and human rights violations, especially because the members face little threat of a standard direct attack. As a security manager, NATO does not exacerbate member concerns about *abandonment*, but certainly can provoke concerns about *entanglement*. Members' interests in system order and stability vary a good deal; some see order and stability as definitely worth fighting for, but this is not a universal view. As David Yost has noted, despite its successes since the Cold War there is no NATO consensus on adversaries and relevant strategies. There is a preference for ambiguity on many matters in

order to maintain a consensus, disagreements on operations and what forces to use, uncertainties about member cohesion and staying power in operations, debates about military modernizing versus arms control that would slow it down, and so on.

Also missing in discussions of tailored "dissuasion" is full appreciation of the difficulty of combining forms of influence. If one offers incentives, then offers threats, this is apt to be taken by an opponent or outsiders as a sign of either instability or being untrustworthy. If one offers threats, then offers incentives, this may readily be seen as a sign of weakness. If one conciliates but strengthens forces in case that fails, this looks like lulling the opponent into talks while preparing to use force. Disagreements like these between the superpowers during the Cold War were legion. They were common among partisans of particular steps in the decision processes or among the US and its allies, and they are often replicated between the US and others on dealing with North Korea or Iran. In tailoring deterrence, all good things will often not go together smoothly.

Fully understanding contemporary deterrence requires grasping that, unlike during the Cold War but common in earlier eras' efforts to manage crises or larger conflicts in part by using threats of nicely limited force, the conflicts will often evolve into serial deterrence efforts, where targets continue, or stop and then resume, doing things deterrence is supposed to prevent. Implementing the threats is unevenly effective, often requiring repetition. Eventually the conflict can settle into reciprocal exchanges of harm (Israel-Palestinians, for example). Here deterrence helps prevent a large attack or outright war but does not ease the parties' frustration (in fact, the deterrence exacerbates it). In serial deterrence the parties inflict reciprocal harm - carrying out threats that failed to work in the hope that this signals and maintains threat credibility, or as a form of bargaining and communication, and an attempt to keep the violence within limits. Each finds the pain inflicted by the other intolerable so the grievances pile up, but not unbearable (so they don't quit). Using tailored deterrence can readily result in this slow motion competition in inflicting pain

and taking risks which the US may not, and others often believe it will not, tolerate for long.

As early in the Cold War as the Korean War the US was worried about deterrence failures turning into low level wars because the opponents were believed better able to tolerate that. Elements of the same problem are evident now. It applies in particular to deterrence for the general welfare, where the motivation is less selfish and less narrowly focused, and the payoffs are relatively abstract, delayed, or indirect.

In discussions of tailored deterrence considerable concern is expressed about preventing the rise of challengers, deterring nuclear proliferation, and the like which falls under the heading of general deterrence. However, the heavy attention is given to anticipating what will be immediate deterrence situations. Actually, the former is much more important that is where deterrence initially fails, after which the chances of a serious crisis and the complete collapse of deterrence start to rise sharply. As many of the previous comments suggest, there is simply too much confidence in general deterrence, particularly nuclear weapons-based general deterrence. Recent studies indicate that many Asian governments and analysts are not significantly upset at the prospect of nuclear proliferation, because they believe that nuclear weapons bring stability into serious conflicts, curbing the chances of disaster (major warfare), and guarantee national security and autonomy as well as regime survival. The US continues to assert that nuclear deterrence remains important for system stability and national security. Yet the nuclear taboo remains unbroken. States with nuclear weapons or other WMD continue periodically to suffer attacks without using them.

## **Important Considerations in Tailoring Deterrence Communications**

Various discussions of tailored deterrence emphasize the difficulties in gaining communications effectiveness in deterrence and call for more attention to the problem. Here are some reflections on that.

1) Theory and some evidence strongly indicate that communications in conflictual situations are apt to be most effective when they are costly to send (with serious penalties for lying or defecting or being misleading, and where the message is politically or in some other way costly for those who sent it). Thus in crafting communications it will be important to learn what opponents see as costly to us to say and send.

- 2) An old suggestion (going back to Schelling)<sup>8</sup> on communicating threats is to *leave no other option* if the opponent fails to comply. This might be effective, but leaders rarely do this because it strips them of control plus the ability and responsibility to make the final decision.
- 3) Another option is to demonstrate what you threaten or promise to do. But success is not guaranteed. China's effort to convince the US it would intervene in Korea by demonstration attacks did not work! A prime example of a US tailored deterrence/compellence threat that worked was the demonstration the US put on at Hiroshima and Nagasaki of its threat to completely destroy Japan.
- 4) Another useful stratagem at times is to allow an opponent access at to your internal communications conveying important military orders in the clear or allowing an opponent to steal some internal communications. The information needed to do this right is obviously difficult to come by.
  - 5) Tailoring must do such things as:
  - -identify hard targets for such communications;
- -detect idiosyncratic aspects of the opponent on communications; and
  - -develop better ways to assess the results.
- 6) More thought is needed on *displaying capabilities* to convey messages (parading weapons, holding maneuvers). This is used a good deal but with little careful study as to when, how, and why it has some effect.
  - 7) Robert Jervis' earliest work<sup>9</sup> demonstrated that opponents

<sup>8</sup> Thomas Schelling discussed this (as in playing Chicken by throwing the steering wheel out), then described arranging situations with a good chance that the deterrer could lose control and carry out his threats - in effect leaving something (a possible disaster for the opponent) to chance - as one way to deter with a somewhat incredible threat. See *Strategy of Conflict*, Cambridge, MA: Harvard University Press, 1960.

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<sup>&</sup>lt;sup>9</sup> Robert Jervis, *The Logic of Images in International Relations*, Princeton: Princeton University Press, 1970.

develop *indices* to assist in evaluating messages, actions, and statements of others because they seem to say much about how reliable those communications are and do not appear readily manipulated. Tailoring will need to determine the indices that opponents are using. A critical question is whether to manipulate the opponent via those indices into believing something untrue, or utilize them to reinforce messages meant to be true. The harm done if the former effort fails can be very serious down the road.

- 8) An old practice is maintaining select channels for extremely important messages (presumably used only so the channels retain reliability). Examples include hot lines, back channels, high level intelligence channels (used between the two Koreas for years), and the long time ambassador as insider (like the Saudi Ambassador in Washington for many years).
- 9) One might also make a fetish of being highly reliable about major communications.
- 10) Ensuring that communications to influence an opponent reflect major American national interests would reject Schelling's argument<sup>10</sup> that commitments are interdependent. Credibility lies not in treating even a minor commitment as vital to uphold, but in plainly having a great deal at stake in the main commitments that one makes.

#### Conclusion - Rules of Thumb

As a result of the complications and difficulties that will afflict a tailored deterrence effort, and the other factors discussed above, the following rules of thumb apply.

First, tailoring should be treated with respect and carefully explored, and pursued when feasible.

Second, efforts to generate the necessary analytical capabilities, information, and planning, plus construct and maintain the appropriate resources, should be continued. Those things will be valuable whether tailored deterrence works or not.

 $<sup>^{10}\,</sup> Thomas\, Schelling, {\it Arms\, and\, Influence}, \, New\, Haven: \, Yale\, \, University\, Press,\, 1966,\, particularly\, p.\,\, 194.$ 

Third, planning for, and acting in coordinated multifaceted ways to shape others' decisions should be enhanced - not only for deterrence but as a wise approach to foreign and security policy.

Fourth, the entire effort should be undertaken with consistent skepticism as to probable success. Don't expect too much and thus don't be misled by any particular success.

Fifth, in modeling the opponents, the deterrence situation, the larger conflict, and the steps to be taken, *multiple models* should be developed that reflect competing premises, assumptions, and analyses. The favorite model should be checked against the alternatives as further information arrives to determine which one is most accurate and relevant. (This is an exceedingly difficult thing to do! It is best pursued via a series of probes, but conflicts often do not provide suitable circumstances.)

Sixth, pursue tailored deterrence as early as possible in a conflict - for purposes of probing and recalculating, interacting with the opponent before his course is set, and for trying conciliation when this is less likely to lead to the opponent concluding that you are soft or making threats when they won't unnecessarily escalate conflict prematurely.

Seventh, combine any threats with assurances and incentives.

Eighth, in tailoring deterrence, do as much as possible privately and directly - not through negotiations in the media, reciprocal public statements, or military steps.

## TAILORED DETERRENCE -A FRENCH PERSPECTIVE

#### Bruno TERTRAIS\*

France is not at the forefront of the debate within NATO on the future of deterrence and retains a fairly conservative nuclear policy. However, the evolution of the French nuclear deterrent has been largely in tune with US and UK policies.

#### **Nuclear Deterrence With Smaller Arsenals**

Nuclear weapons will remain the ultimate guarantee of a nation's survival for the foreseeable future. There is no alternative means of defense on the horizon which may threaten in a credible way the complete destruction of a State as a coherent entity, in just a few minutes. Conventional weapons could conveivably do the job, but only through repeated and multiple raids and with a lesser guarantee of success. Moreover, conventional weapons cannot instill in the adversary's mind the very peculiar fear induced by nuclear weapons. Biological weapons are arguably as scary as nuclear ones - and perhaps even more so, in particular for public opinion. But their use can be controlled only with difficulty. More importantly, they are not able to physically destroy government buildings, factories, command posts and arsenals. Unless perhaps deployed in space in very large numbers, strategic defenses will not be effective against a large number of missiles equipped with decoys and multiple warheads. Finally, threatening some particular hardened targets will continue to be possible only by nuclear means.

But future deterrence will be ensured with smaller nuclear arsenals. In the coming twenty years, Western nuclear stockpiles will continue

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to be reduced. There are six reasons for this.

Dramatic increases in the accuracy of conventional weaponry mean that many targets which previously could be threatened only by nuclear forces can now be neutralized by conventional means.

Increases in accuracy and reliability also affect nuclear planning: all things being equal, having more accurate and reliable warheads means that some reductions in arsenals are feasible.

In the absence of nuclear testing, all nuclear powers will have to go down the road of more robust warhead designs. This means bigger and heavier warheads, and thus a reduction in the number of weapons carried by ballistic missiles. This could also mean a reduction in the number of warheads kept in reserve.

As time passes and the nuclear "taboo" gets more entrenched with each year that separates us from the Hiroshima and Nagasaki bombings, it is possible that nuclear strike options may be reduced in size and scope. Twenty years after the end of the Cold War, the use of thousands of nuclear weapons in a single set of strikes appears incredible. Threatening the use of hundreds of nuclear weapons will soon appear as lacking any credibility.

Development and modernization create vulnerabilities. Many countries rely on a few economic centers and transportation nodes for their economic growth and development. Thus, it might become possible to threaten "unacceptable damage" to a large, developing State with only tens of well-targeted weapons.

The growing support for the idea of abolition within Western political and intellectual elites will contribute to pressures for further reductions.

Furthermore, if the United States and Russia were to abandon large-scale planning options aimed at conventional and nuclear forces, their stockpiles could probably be reduced to hundreds instead of thou-

sands of nuclear warheads. However, such an eventuality would require assurances that China would not increase dramatically the number of its own nuclear forces. Neither Moscow nor Washington would like to see China become the strongest nuclear power. This, in turn, would require a strategic decision by the United States to limit the extension of its strategic missile defense deployments – a decision which would mean accepting the vulnerability of the US homeland to a Chinese ballistic strike. Whether this is an acceptable choice is up to the U.S. government. In any case, a significant reduction in total nuclear stockpiles would take a lot of time, given the quantity of warheads that would need to be dismantled.

### **Tailored Nuclear Deterrence Requirements**

Most nuclear weapon States, with the possible exception of Pakistan, now have to consider multiple potential adversaries.<sup>1</sup> Threats will also be more diverse than was the case during the Cold War, when survival was at risk for the Western world and the Communist world. The need to "tailor" nuclear deterrence will be almost universal.

Communication is a key problem. A common understanding of the stakes and proper communication of threats will be absolute necessities. When stakes get high, failing to understand the stakes and communicate effectively may be fateful. On several occasions in the past, the world came close to a nuclear war: in 1962 (the Cuban missile crisis), but also to a lesser extent in 1973 (the Yom Kippur war), in 1983 (the NATO *Able Archer* exercise), and in 2002 (the India-Pakistan face-off).

Unfortunately, history shows that such understanding is all too frequently lacking. A few recent examples testify to that fact. In 1990, Saddam Hussein did not think that the invasion of Kuwait would trigger such a strong reaction from the United States, while Washington thought that an Iraqi invasion would not be a rational decision.<sup>2</sup> In 1999, Slobodan Milosevic did not believe that NATO would have the fortitude to escalate

<sup>&</sup>lt;sup>1</sup> There is no available evidence to suggest that Pakistan's nuclear deterrent could be directed at any country other than India.

<sup>&</sup>lt;sup>2</sup> Alex Hybel, *Power over Rationality* (Albany: University of New York Press, 1993), pp. 51-56.

the conflict, and expected support from Moscow.<sup>3</sup> For its part, the Alliance underestimated Serbia's determination to resist.<sup>4</sup> In 2003, Iraq expected a limited American bombardment, not an invasion.<sup>5</sup> The United States – as well as many Western analysts – could not believe that Iraq had gotten rid of its weapons of mass destruction, or, if it had, that it would not have kept detailed records of the implementation of such a decision. In 2006, Hezbollah leader Hasan Nasrallah did not expect such a strong Israeli reaction.<sup>6</sup> Conversely, the Israelis had not imagined that their enemy could be so well-trained and well-equipped.<sup>7</sup>

Tailoring deterrence requires excellent intelligence and analysis capabilities, as well as adaptive, quick-reaction planning.

As for the nuclear dimension *per se*, deterrence has to reconcile two imperatives. It has to be credible in the eyes of an adversary: this implies maintaining the option of using smaller yields for less-than-vital contingencies involving regional powers, especially when targets are located in urban areas. However, tailored deterrence should not be equated with low yields in all cases. Critical or time-sensitive targets may be hardened or have a large fooprint. If a Western head of State or government was to seriously consider the use of nuclear weapons, he or she would demand the highest possible chance of success. There would be only one thing worse than initiating a nuclear strike, and that would be initiating such a strike and failing to end the conflict.

Tailoring nuclear deterrence presents particular challenges for smaller nuclear powers. Their capabilities in terms of intelligence and analysis, which are essential in order to exercise a credible and appropriate deterrent threat, are necessarily limited. They may not give smaller nuclear powers the ability to understand and properly take into account a

<sup>&</sup>lt;sup>3</sup> Keith Payne, « The Fallacies of Cold War Deterrence and a New Direction», *Comparative Strategy*, vol. 22, n° 5, 2003, p. 414, p. 422.

<sup>&</sup>lt;sup>4</sup> Bill Sammon, «Clinton Misread Yugoslav Resolve», The Washington Times, 21 June 1999.

<sup>&</sup>lt;sup>5</sup> «Interrogator: Invasion Surprised Saddam », CBS News, 24 January 2008.

<sup>&</sup>lt;sup>6</sup> Amos Malka, «Israel and Asymmetrical Deterrence», Comparative Strategy, vol. 27, 2008, p. 15.

<sup>&</sup>lt;sup>7</sup> Adam Garfinkle, *Culture and Deterrence*, Foreign Policy Research Institute, 25 August 2006, p. 6.

wide range of potential adversaries. Increased flexibility in terms of warhead types and yields may not easily be reconciled with nuclear surety constraints. Managing a diverse force at low numerical levels is not an easy task given the very high standards that are applied in this field – including proper command and control procedures, adequate training, and maximum security.

## The Evolution of French Nuclear Policy

Even though they do not use the expression "tailored deterrence", the French have adapted their deterrent posture so as to be able to adapt the deterrent threat to the stakes involved.<sup>8</sup>

The need for increased flexibility in nuclear options was first recognized publicly in the mid-1990s, under the presidency of Jacques Chirac.

A major defense review took place in 1995. The French government decided to build a longer-range submarine-launched ballistic missile (SLBM), the M51, in order to allow for broader coverage and to be able to reach distant countries.

A full-scale nuclear policy review took place in the years 1998-2000. Some of its results were announced in a June 2001 speech by Chirac. He said in particular that targeting against a regional power would focus "in priority on its centers of power, political, economic, and military". Other high-level French officials publicly hinted that the French arsenal had been adapted to allow for targeting of such centers of power.

In January 2006, other adaptations were announced. Chirac said that the number of warheads had been reduced on some of the existing SLBMs. He also indicated that State-sponsored terrorism and threats against strategic supplies would not necessarily be excluded from the

<sup>&</sup>lt;sup>8</sup> A more common expression in French strategic circles is dissuasion adaptée ("adapted deterrence").

<sup>&</sup>lt;sup>9</sup> Discours de M. Jacques Chirac, Président de la République, à l'occasion de la clôture de la 53<sup>ème</sup> session de l'Institut des Hautes Etudes de Défense Nationale, Paris, 8 June 2001.

scope of France's vital interests (French doctrine holds that an attack against the nation's vital interests would trigger a nuclear response.). Finally, he referred to missile defense in a more positive way than in the past, noting that it could be a useful "complement" to deterrence through the threat of nuclear retaliation. A few days later, an unnamed high-level official briefed a number of reporters on the fact that France had included in its menu of nuclear strike options a high-altitude shot designed to exploit electro-magnetic pulse (EMP) effects. 11

In March 2008, President Nicolas Sarkozy confirmed the broad orientations of French nuclear policy and doctrine. He stated that "for deterrence to be credible, the Head of State has to have at his disposal a large range of options to face the threats. Our nuclear forces have been adapted to that effect. They will continue to be". He reaffirmed that France would continue to rely on two different nuclear systems, and noted that the characteristics in terms of range and accuracy of these two systems (the M51 SLBM and a new air-breathing system, the ASMPA) made them complementary to each other. 12 Sarkozy also confirmed that the French nuclear deterrent would be valid "wherever the threat would come from and whatever its form", thus implicitly confirming the continued validity of Chirac's statements. He also implied that the "centers of power" targeting criterion would be valid whatever the adversary – thus breaking with the traditional distinction made in French official language between "major powers" and "regional powers". 13 He mentioned the traditional "warning shot" concept – an option that has existed in the French doctrine since the early 1970s – but did not call it, as has usually been the case, a

<sup>10</sup> Allocution de M. Jacques Chirac, Président de la République, lors de sa visite aux forces aériennes et océanique stratégique, Landivisiau / l'Île Longue, 19 January 2006.

<sup>&</sup>lt;sup>11</sup> See Jean Guisnel, "Armement nucléaire: innovation française", Le Point, 9 February 2006.

<sup>&</sup>lt;sup>12</sup> The M51 is an intercontinental-class submarine-launched ballistic missile. The ASMPA (Air-Sol Moyenne Portée, Amélioré) is a shorter-range air-launched cruise missile. In his 2008 speech, Sarkozy announced a reduction by a third of the air-based component. This reduction was primarily driven by the increased capabilities of the ASMPA as compared with those of its predecessor, the ASMP (Air-Sol Moyenne Portée).

<sup>&</sup>lt;sup>13</sup> Specifically, Sarkozy said that the French nuclear force would target "in priority the political, economic and military centers of power". Discours de M. le Président de la République à l'occasion de la présentation du SNLE Le Terrible, Cherbourg, 21 March 2008.

"final warning". 14 No explanation was given as to whether this was a significant doctrinal development (allowing the repetition of a nuclear warning, if necessary) or just a name change. Finally, he mentioned, as Chirac had done in 2006, that France views missile defense against a "limited strike" as a useful complement to nuclear deterrence.

The French continue to have a fairly conservative approach to the concept of deterrence in general. (To Gallic ears, the word "deterrence" generally means "nuclear deterrence".) However, there is no doubt that these changes and adjustments have made the French nuclear deterrent much more flexible than in the past, allowing for effective "tailored" deterrence.

#### Tailored Nuclear Deterrence and the Atlantic Alliance

There has thus been a growing nuclear consensus within NATO among the three Alliance nuclear powers – starting with the adoption of the 1999 Strategic Concept, and moving on to adaptations made to the British and French doctrines. In particular, the British and French doctrines seem hardly distinguishable one from another. (Where these two countries differ from the United States is essentially on the more central role given by them to nuclear deterrence, as opposed to conventional options and missile defense.)

At the same time, many non-nuclear NATO members are weary of the absence of progress towards nuclear disarmament. Germany, Norway, the Netherlands and Canada are among the Alliance members most vocal about the need to go forward in that direction. The United Kingdom, for its part, plays a delicate balancing act: it has decided in principle to renew its Trident system but has also strongly reaffirmed its commitment to the goal of complete nuclear disarmament.

An interesting conjunction of events is appearing on the horizon. The next NPT Review Conference will take place in 2010. Many Western nations will want progress on nuclear disarmament to ensure the contin-

<sup>&</sup>lt;sup>14</sup> Sarkozy mentioned a "nuclear warning" that would be aimed at "restoring deterrence" (Ibid.).

uation of the treaty's validity and legitimacy. Immediately afterwards (2011-2013), construction of the U.S. missile defense site in Central Europe is due to be finished, and other NATO missile defense programs should come to fruition. Around 2015-2020, many NATO nuclear-capable bomber aircraft, which can carry US B-61 gravity bombs, will have to be replaced. 15

This arsenal allows for "tailoring" deterrence options both at the political level and at the strategic level.

However, so far, most European "host" nations (those who have a nuclear role) have postponed decisions about paying the additional costs needed to give a nuclear capability to the *Eurofighter* or the *Joint Strike Fighter* (JSF). Given that Europe should then be protected by U.S. missile defenses, some countries might consider a termination of the ability for the five European countries to deliver nuclear weapons.

This would not necessarily mean the end of nuclear burden-sharing. The United States might, for example, retain a number of nuclear weapons in some of these countries – perhaps only in the United Kingdom and Turkey – for use exclusively by US air forces.

Such a decision could form the basis of a new nuclear policy consensus within the Alliance. However, it would also reduce NATO's ability to tailor deterrence at the political level, since a hypothetical NATO nuclear threat would only involve US nuclear bombers (possibly accompanied by European aircraft in support roles).

Any decision to further reduce the US nuclear presence in Europe should thus be carefully pondered. Only the prospects of great, tangible benefits in the realm of disarmament and non-proliferation would warrant such a decision.

<sup>&</sup>lt;sup>15</sup> According to open sources, the US continues to station a number of B-61 gravity bombs in Belgium, Germany, Italy, the Netherlands, Turkey and the United Kingdom, for use by US and European aircraft (except for the UK, where they are reserved for US use).

France is not directly involved in this debate, since its nuclear force is not formally assigned to NATO and there is no French presence in the Nuclear Planning Group. <sup>16</sup> However, Paris will probably have to take a stance on the issue of the US nuclear weapons presence in Europe, given its rapprochement with NATO and its participation in missile defense programs.

<sup>16</sup> A French return to the NATO integrated military structure would probably not alter this situation.

## NON-NUCLEAR CAPABILITIES IN TAILORED DETERRENCE

## Joseph F. PILAT\*

As introduced in the 2006 Quadrennial Defense Review (QDR), the vision of "tailored deterrence" involves a "future force [that] will provide a fully balanced, tailored capability to deter both state and non-state threats ... while assuring allies and dissuading potential competitors." In this vision, the force will possess "more tailorable capabilities." In addition to a robust nuclear deterrent, the force will include a wider range of conventional strike capabilities, including Prompt Global Strike (PGS) with next generation long-range conventional precision strike systems, and of non-kinetic capabilities; integrated ballistic and cruise missile defenses; and a responsive infrastructure. The force envisaged will be supported by a robust and responsive National Command and Control System; advanced intelligence; adaptive planning; and the ability to maintain access to validated, high quality information for timely situational awareness.<sup>3</sup>

All of the capabilities referred to in this vision are associated with the New Triad introduced in the 2001 Nuclear Posture Review (NPR). In reality, the capabilities available for tailoring include all existing military capabilities—the whole defense and security apparatus—and even non-military capabilities.

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<sup>&</sup>lt;sup>1</sup> Quadrennial Defense Review Report (Washington, DC: U.S. Department of Defense, February 6, 2006), p. 49.

<sup>&</sup>lt;sup>2</sup> Ibid., p. 4.

<sup>&</sup>lt;sup>3</sup> Ibid., p. 49.

The New Triad was rarely discussed publicly by the Bush Administration and was not widely embraced by the strategic community. Moreover, the concept has been seen by many observers exclusively in light of the criticisms of the NPR. As a consequence, the term is unlikely to survive the transition to the next US Administration, which would in any case be expected to put its own stamp on strategic policy. However, much of the strategic framework it provided can be expected to survive. This framework is evolutionary. Deterrence was central during the Cold War. Nuclear forces were the basis for deterrence and, although conventional forces have always been important and defenses were seen as critical during several periods, neither were seen to be useful in deterring the Soviet Union and, in the case of defenses, in having an impact on a large-scale Soviet nuclear attack. In the new strategic framework, deterrence no longer holds its central Cold War position, and it is no longer expected to be based exclusively (or even primarily) on nuclear weapons. The increasing role of non-nuclear forces and defenses reflects the shift of nuclear deterrence from the center of US and Alliance security calculations, the reduced numbers and roles of nuclear weapons, the growing capabilities of conventional forces and the emergence of defenses.

The expenditure of intellectual capital and other resources on nuclear deterrence was considerable; there have been no comparable investments in the deterrent roles of non-nuclear forces and defenses. In this context, capabilities are not the leading issue—the political, cultural and other aspects of tailored deterrence are more significant—but questions about the non-nuclear weapon requirements for tailored deterrence in the transatlantic alliance are significant. What are the instruments of non-nuclear deterrence and what can they be expected to do? Are the existing non-nuclear capabilities of the United States and the Alliance, including missile defenses, adequate? What are the prospects for non-nuclear strategic deterrence using conventional weapons? Is tailoring capabilities realistic for NATO?

## What are the instruments of non-nuclear deterrence and what can they be expected to do?

Non-nuclear offensive capabilities (both kinetic and non-kinetic) can in principle be a part of a deterrence by punishment strategy, albeit

kinetic capabilities and in particular the threat of overwhelming conventional force are more suited for this role. These forces, particularly Prompt Global Strike (PGS) and possibly non-kinetic capabilities, can be part of a deterrence by denial strategy by providing capabilities to create doubt in an adversary's mind that it could successfully carry out a weapons of mass destruction (WMD) or terrorist attack.

To the extent that the credibility of deterrence will increase as the vulnerability to WMD and other attacks of the United States, its forces, interests and allies can be reduced, active and passive defenses are important. Missile and air defenses to protect the US and NATO territory and forward-deployed forces, as well as passive defenses, including capabilities needed to defend potential military and civilian targets from WMD delivered by ballistic and cruise missiles, can play a role in deterrence.

They can increase the credibility of deterrence by punishment strategies, particularly against nuclear- or WMD- armed adversaries. They are more critical to a deterrence by denial strategy to the extent that their effectiveness can create uncertainties about the effects of an adversary's attack. It is argued that the deployment of ballistic or cruise missile defenses will force states to conclude that proliferating missile technology, or considering the use of ballistic and cruise missiles against the United States or its allies, is not in their best interests.

In similar fashion, consequence management and post-conflict recovery plans and capabilities are also critical elements of a deterrence by denial strategy. As well, they are argued to further the goals of dissuasion and assurance.

In the non-military arena, diplomacy can promote deterrence beyond its key role in reaffirming or refining deterrence messages, including the delivery of ultimatums. The threat of diplomatic isolation can be a part of a deterrence by punishment strategy. Sanctions can support deterrence as part of a punishment strategy or, if they involve such measures as financial or technology restrictions or bans, can be part of a denial strategy. In the same vein, embargos, blockades and other such actions can play a role in punishment or denial strategies. The threat of criminal prosecutions for leaders or others can also be an important deterrence by punishment tool.

For combating nuclear proliferation and terrorism, support for the international nuclear nonproliferation regime can play an important role in deterrence by denial strategies. The Treaty on the Nonproliferation of Nuclear Weapons (NPT) regime, if fully implemented, can reduce access to or the availability of nuclear weapons and materials. This highlights the importance of compliance with the treaty, including the need to address clandestine procurement networks that can be exploited by rogue states and terrorists. Improved nonproliferation efforts, including enhanced export controls, international safeguards, material protection, control and accountancy (MPC&A) and other cooperative threat reduction efforts, interdiction (via the Proliferation Security Initiative), etc., can enhance the prospects for a deterrent effect. Advances in research and development (R&D) leading to deployment of more effective technologies to detect, disable, disarm, etc., nuclear weapons may also enhance such efforts. If these measures pose significant challenges or obstacles, they may effectively deter or dissuade nuclear proliferation and terrorism. Even more important are efforts to develop and improve means of attribution through nuclear forensics. Work is proceeding on technologies, techniques and other elements of this challenging problem. The same logic applies to biological and chemical nonproliferation regimes as well.

The role of soft power and especially of incentives of various kinds, from economic and security assistance to development aid to financial or other inducements, for restraint have been discussed in terms of the non-military capabilities that may be enlisted in tailored deterrence strategies. Such measures have some history in the nonproliferation context. However, even though they may be elements of broader influence strategies, it is difficult to argue that they are related directly to deterrence.

All of these capabilities are intended to strengthen deterrence. They are also expected to provide additional nonnuclear options to the

United States and the Alliance in cases where deterrence or dissuasion fails, or are seen as likely to fail. It is also assumed that these capabilities will be needed to take preemptive actions, if deemed necessary.<sup>4</sup>

# Are the existing non-nuclear capabilities of the United States and the Alliance, including missile defenses, adequate?

Not only did the QDR not develop the concept of tailored deterrence; it did little more than list the capabilities that might be used in tailored deterrence, without a discussion of specific capabilities or of the way they could be brought to bear in specific scenarios. While future requirements are not clear, they will be based on specific adversaries in specific scenarios. The range of adversaries—state and non-state actors, including their state supporters—creates multiple targets for deterrence.

The Soviet Union and the challenges it posed are gone, and concerns about a resurgent Russia declined over the 1990s. However, differences over NATO expansion, missile defenses and other issues, and a new Russian assertiveness driven by oil and gas revenues, have raised the issue of NATO-Russian relations again. This downturn in relations is unlikely to return us to Cold War nuclear deterrence. However, in light of the full range of dangers confronting the alliance today, the United States and NATO will continue to rely on nuclear deterrence. US commitments to NATO depend on maintaining capabilities sufficient to meet all US alliance obligations.

Against WMD-armed states, the United States and the Alliance will need to bring to bear a range of capabilities, including nuclear deterrence, missile defenses, and conventional air, sea and space capabilities to counter any attack or possibly other efforts toward regional destabilization, offensive and defensive information operations, etc. In some cases, a strategic-level signaling strike against WMD could in theory be undertak-

<sup>&</sup>lt;sup>4</sup> See Gen. Klaus Naumann, General John Shalikashvili, Field Marshal The Lord Inge, Admiral Jacques Lanxade, and General Henk van den Breemen, *Towards a Grand Strategy for an Uncertain World: Renewing Transatlantic Partnership* (Lunteren, The Netherlands: Noaber Foundation, 2007), pp. 93-99; see also *The National Security Strategy of the United States of America* (Washington, DC: The White House, September 2002), pp. 13-16.

en. Ultimately, the US objectives will be to destroy WMD and infrastructure, as well as to prevent use against regional allies or forward-deployed forces and the US homeland. Within this context, specific forces and operational concepts will depend upon the state of concern, as well as US interests and commitments in the region.

Operations against terrorists and their safe havens require the full range of conventional capabilities. The objectives will be designed to disrupt and destroy the terrorists, and to deter state sponsorship, while protecting the US and Allies' territory, forward deployed forces, etc. Longrange strikes and deployment of special operations forces (SOFs) should figure prominently. There may be some value in maintaining a nuclear deterrent threat by holding some targets at risk in state sponsors of terrorism, especially those with missiles and WMD. Precise forces and operational concepts could differ dramatically based upon the terrorists and the sponsor.

Also, there may be other missions and contingencies requiring strategic operations with a strong political-military focus.

In the US concept, tailored deterrence would utilize a portfolio of capabilities tailored to a specific adversary. In each case, the capabilities used would depend on the suite of available overall capabilities. Given the dynamic and fluid threat environment and other uncertainties, tailoring could in theory require a virtually unlimited suite of capabilities. In practice, however, tailoring will have to bring existing capabilities to bear in deterring and dissuading adversaries, as well as reassuring friends and allies. If tailored deterrence today required new capabilities, it would not be very "tailorable," given the long lead times required for developing and deploying major weapon systems—nor could it be effective, it would seem.

Of course, the QDR recognized that new capabilities would be needed to fully realize the vision. Future requirements are uncertain, but there will be a need to evolve capabilities over time to ensure that forces in being can meet emerging and future challenges. In recent years, BMD and the Conventional Trident Modification (CTM) are among the programs regarded as necessary enhancements to the non-nuclear part of strategic deterrence capabilities. BMD has proceeded but CTM has not been funded to date. Beyond these programs, likely requirements for US long-range strike (kinetic and non-kinetic) include:

- next generation long-range precision strike systems, including stealthy long-range cruise missiles, non-nuclear ballistic missiles and a new bomber (manned or unmanned, subsonic or supersonic, aerospace);
  - guided missile submarines;
- enhanced space capabilities, including a space-based radar, a Space Maneuver Vehicle, etc.;
- non-kinetic strike, including information operations capabilities (offensive and defensive);<sup>5</sup> and
  - enhanced active and passive defenses.

In addition to new systems, there is a clear and recognized need for the procurement of more of the following capabilities:

- strategic air lift;
- manned and unmanned reconnaissance and surveillance assets;
- C<sup>2</sup> aircraft; and
- SOFs.

To meet future needs will require a modernized, reinvigorated and revitalized defense infrastructure, conventional as well as nuclear. Developing and possibly prototyping a range of adaptable conventional weapon concepts, as well as defenses, will be necessary if the United States and the Alliance are to be confident of their ability to respond to the changing world. It will be important for the United States and the Alliance to proceed on the basis of forces in being rather than the promise of capa-

<sup>&</sup>lt;sup>5</sup> The suite of technologies referred to as non-kinetic strike capabilities, including information operations, could in principle meet certain counterforce needs, and also create new arenas for action (with minimal costs, and a lesser amount of damage and death). If they are proven technically feasible and appropriately used, such novel capabilities could solve some of the problems associated with military responses without being less effective.

bilities embodied in the infrastructure. Infrastructure improvements will not by themselves provide a virtual deterrent. Infrastructure can complement and augment existing capabilities; it cannot replace them.

Tailoring can be done with existing forces, but transformation will be needed over time and will in the long term require US and NATO forces and associated capabilities to be adaptive, flexible and responsive to a fluid security environment. Although credible nuclear forces will remain important, conventional force capabilities and missile defenses will have an increasing role. Strategic conventional forces will be needed for the full spectrum of contingencies the United States and the Alliance will face.

# What are the prospects for non-nuclear strategic deterrence using conventional weapons?

The increasing role anticipated for non-nuclear capabilities in deterrence reflects the US and NATO removal of nuclear deterrence from the center of security calculations, reduced numbers and roles for nuclear weapons, and the hope that conventional capabilities can substitute for nuclear forces in even more missions in the future. Is this view sound? Will non-nuclear capabilities deter? The view that conventional weapons can replace nuclear forces in many missions and will increasingly provide for future deterrence is becoming received wisdom, despite the fact that there is little analytic basis for this assumption.

The US conventional superiority evident since the Gulf War created hopes of a viable conventional deterrence posture. Although the NPR did not advocate a conventional deterrence posture, it opened up the prospect of a greater role for conventional forces in deterrence. Many argue that US deterrence is increasingly conventional rather than nuclear. This is an issue to the extent that some hold that conventional deterrence will allow the United States to forego nuclear deterrence, at the very least in most contingencies. Such beliefs are largely based on speculations about the behavior of so-called "rogue" states if confronted with overwhelming conventional power.

In this contingency, a regional aggressor might be deterred or it might decide that the best means to negate the conventional advantages of the United States and the Alliance is by threatening or using WMD. The record of conventional deterrence in recent years is mixed at best. The need for asymmetric responses to US conventional power, on the other hand, was clearly one of the lessons of the Gulf War for aspirants to regional hegemony. And WMD will be even more threatening to US power projection forces in the future, as vulnerabilities to WMD develop as a result of anticipated reductions in conventional weapon platforms and greater dependence on sensor and information systems. In the conventional as in the nuclear realm, every effort to enhance the survivability of weapons and related systems, military bases, troop concentrations and the like, is critical.

In any event, too great a reliance on conventional capabilities for deterrence may be imprudent in the long term for other reasons as well. Conventional deterrence has never been demonstrated to be effective, and its failures are legion. If advanced conventional capabilities were used decisively, and successfully, in battle, and particularly in preemptive actions, they could have a deterrence effect. Despite the new focus on deterring forward, and the development of capabilities to do so, in reality, conventional forces sufficient to deter a threat may not be available in a region of concern in time to prevent aggression. In the Gulf War, for example, it took months before US conventional forces in the region were seen as strong enough to deter further aggression. Current and future conventional forces may not be able to provide an effective deterrent against nuclear, biological or chemical threats from states or terrorists.

Although it is not clear that non-nuclear forces will play a significant role in deterrence by punishment, these capabilities, especially defenses, may be expected to play a greater role in deterrence by denial. However, this will depend on technological advances in BMD, among other developments.

There may be ways to strengthen conventional deterrence, especially in the context of remaining nuclear deterrent capabilities. However,

there are potential problems. For example, critics of CTM argue that the launch of a Trident missile armed with conventional warheads to destroy a terrorist camp or a cache of WMD could be misinterpreted by Russian or other early warning systems as a US nuclear attack. This concern may be overstated, due to the different signatures of a limited conventional mission as opposed to a disarming first strike, but any residual concerns may be addressed by the development of transparency and confidence building measures to ensure that there is no misunderstanding.

Doubts about the efficacy of non-nuclear deterrence today and tomorrow do not mean that the importance of non-nuclear capabilities will diminish. In fact, their importance may be expected to grow. They will be provide non-nuclear options in cases where deterrence or dissuasion fails, or is seen as likely to fail. In addition, US and Alliance non-nuclear forces may be needed for such missions as:

- conventional war fighting;
- peacetime training of foreign forces;
- special operations; and
- military government.

In fact, we may expect existing and future non-nuclear capabilities to contribute as much or more to strategic objectives other than deterrence, and to be pursued not only for deterrence but for these other rationales as well.

## Is tailoring capabilities realistic for NATO?

According to General Naumann and others, in a study entitled *Towards a Grand Strategy for an Uncertain World*, NATO "has lost the momentum required for transformation of its forces." As a consequence, they argued, the Alliance is "in danger of losing its credibility."

These judgments are serious and reflect the longstanding US and

<sup>&</sup>lt;sup>6</sup> Towards a Grand Strategy for an Uncertain World, p. 75.

<sup>7</sup> Ibid.

Alliance view that the capabilities underlying deterrent threats are a critical aspect of their credibility. There is a real concern about eroding and atrophying capabilities in the Alliance, and the political will to develop credible capabilities in the future. However, the United States has unprecedented conventional military capabilities. The forces available to the United States and the Alliance are highly capable and, although not all are optimized for the emerging world, should be able to meet the challenges the Alliance confronts in the near term if the Allies demonstrate political will. But will the US and NATO be able to transform their forces over time to ensure that needed capabilities are developed across the Alliance, that interoperability is optimized, and that risk-, responsibility, and burden-sharing are achieved despite varying investment, capability and force levels? If it chooses to do so, there is no reason that NATO cannot move in this direction.

In this context, the concept of tailored deterrence, if accepted by the Alliance, could provide a basis for reshaping capabilities in the longer term, and for identifying the programmatic priorities and resource reinvestments needed to move toward a future force capable of meeting emerging challenges. But it may be possible to move forward even absent agreement on tailored deterrence, and perhaps even deterrence itself. The Bucharest Summit Declaration of 3 April 2008 reaffirmed the need to transform the Alliance's forces and capabilities. According to the declaration:

We have already done much to transform our forces and capabilities ... We will continue this process to ensure the Alliance remains able to meet its operational commitments and perform the full range of its missions. Our operations highlight the need to develop and field modern, interoperable, flexible and sustainable forces. These forces must be able to conduct, upon decision by the Council, collective defence and crisis response operations on and beyond Alliance territory, on its periphery, and at strategic distance, with little or no host nation support. We will also ensure that we have the right kind of capabilities to meet

the evolving security challenges of the 21st century, and to do so, we will transform, adapt and reform as necessary. <sup>8</sup>

### Among the capabilities highlighted were:

- improving strategic lift and intra-theatre airlift, including mission-capable helicopters;
- strengthening information superiority through networked capabilities, including an integrated air command and control system, increased maritime situational awareness and timely delivery of the Alliance Ground Surveillance capability;
- enhancing the capability and interoperability of special operations forces;
- improving trans-Atlantic defense industrial cooperation; and
- reforming defense planning processes in order to promote timely delivery of capabilities.<sup>9</sup>

At the Bucharest Summit, the Allies also supported missile defenses, reflecting the belief that they could play an important role in enhancing deterrence and defense. The declaration stated:

Ballistic missile proliferation poses an increasing threat to Allies' forces, territory and populations. Missile defence forms part of a broader response to counter this threat. We therefore recognise the substantial contribution to the protection of Allies from long-range ballistic missiles to be provided by the planned deployment of European-based United States missile defence assets. We are exploring ways to link this capability with current NATO missile defence efforts as a way to ensure that it would be an integral part of any future NATO-wide missile defence architecture. Bearing in mind the principle of the indivisibility of Allied security as well as NATO solidarity, we task the

<sup>&</sup>lt;sup>8</sup> Bucharest Summit Communiqué, 3 April 2008, paragraph 44.

<sup>&</sup>lt;sup>9</sup> Ibid., paragraph 45.

Council in Permanent Session to develop options for a comprehensive missile defence architecture to extend coverage to all Allied territory and populations not otherwise covered by the United States system for review at our 2009 Summit, to inform any future political decision. <sup>10</sup>

The Bucharest declaration also referred prominently at several points to activities employing non-military capabilities, such as non-proliferation efforts.

The program outlined at the Summit will nonetheless be difficult to carry out. Moreover, these programs are not the end point. There is a need for more transatlantic cooperation, greater European coordination on defense capabilities, and expanded NATO-EU cooperation. Again, tailored deterrence could help focus such efforts. If NATO cannot otherwise meet the challenges it faces, the possibility of US-led coalitions of the willing that involve some NATO member states will no doubt be considered as the need arises.

To meet the full spectrum of possible threats, the United States and NATO will require adaptable, flexible and responsive forces. US strategy must recognize that US forces (nuclear and conventional) are not optimally configured for deterring and countering today's and tomorrow's threats, and that active defenses currently in development are unavailable in the near term for anything but very limited missions.

#### Conclusions

Over the last two decades, a dramatically changed security environment and reduced nuclear forces have altered the calculus of deterrence and defense. Tailoring deterrence to address emerging threats is a possible response to the new reality. Tailoring can and will have to be done with existing forces, but transformation will be needed over time and will in the long term require US and NATO forces and associated capabilities to be adaptive, flexible and responsive to a fluid security environment. Credible

<sup>&</sup>lt;sup>10</sup> Ibid., paragraph 37.

nuclear forces will remain important, but conventional force capabilities and missile defenses will have an increasing role. Strategic conventional forces will be needed for the full spectrum of contingencies the United States and the Alliance will face, including providing non-nuclear options in cases where deterrence or dissuasion fails, or is seen as likely to fail.

## CAPABILITIES FOR DETERRENCE: NUCLEAR FORCES

### Victor UTGOFF\*

#### Introduction

This paper addresses five issues bearing on the future of US nuclear forces. First, it provides a perspective on the many-faceted debate taking place in the United States on the future of the US nuclear deterrent.

This raises the question of why the US needs nuclear weapons for the foreseeable future. So, second, the paper posits what the author believes is a good answer. A good answer is needed to justify the expensive programs that must start soon to renew US nuclear weapons capabilities. The US needs to recreate the infrastructure needed to build modern nuclear weapons at minimally reasonable rates. And it needs to design and build replacements for aging US nuclear weapons and delivery systems. Understanding why the US continues to need nuclear weapons is also important if other states' nuclear weapons programs are substantially rationalized, if not actually motivated, by US retention of large nuclear forces.

Third, the paper comments on some of the more important factors that drive the size of the US nuclear weapons stockpile. These comments remind us that the size of the US nuclear stockpile seen as necessary depends upon political, military, and technical judgments. And the flexibility of some of those judgments seems likely to accommodate a compromise outcome for the ongoing American debate on the future of its nuclear forces – a compromise that trades, among other things, substantial further reduction in the size of US nuclear forces for modernization of those that are to remain.

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Fourth, the paper comments on the potential value of new types of nuclear weapons, and more specifically, on the value of weapons with improved operational capabilities of various kinds. Finally, the paper addresses the question of extended nuclear deterrence (END) and the role that strengthened and expanded US END guarantees might play in helping to dissuade nuclear proliferation.

## A Perspective on the Ongoing American Nuclear Debate

A debate on the future of US nuclear forces has been building for at least the last decade. And everyone involved with nuclear weapons issues recognizes that important decisions about the future size and nature of those forces are going to have to be made by the next US president. Numerous papers have been and are being written in the US on nuclear weapons and forces issues. The following short descriptions of the factors that seem to be significantly affecting, if not driving, the debate can illustrate its general nature and the substantial political polarization among US experts and officials on nuclear weapons issues.

First, high level officials in the US government have paid only episodic attention to nuclear forces issues for twenty years. Toward the end of the Cold War, and in its immediate aftermath, large reductions were made in the nuclear forces of both Russia and the US, and reductions have continued since then. The large nuclear forces that the two superpowers had maintained no longer seemed necessary. Reductions in nuclear forces and supporting personnel were seen as freeing funds for other needs. Involvement with shrinking nuclear forces was no longer seen as a promising career path. High level government officials had better things to do, and responsibilities for managing, operating, and advocating for nuclear forces floated down to less senior officials.

Second, absent continuous high level attention, it is not especially surprising that the "zero defects mentality" that characterized US operations and handling of nuclear weapons during the Cold War appears to have eroded. This is illustrated by recent revelations, including an accidental cross-country flight of nuclear armed cruise missiles on a US bomber

in August 2007, and the subsequent discovery that fuses for nuclear ICBM warheads had been shipped to Taiwan by mistake. Steps have been taken and more are being pursued to restore the zero defects mentality.

Third, these problems have highlighted the need for more attention to nuclear matters by high levels of government. Not surprisingly, the Secretary of Defense has taken more interest in nuclear weapons matters. In June 2008 he forced the Chief of Staff and the Secretary of the Air Force to resign for reasons that include lapses in Air Force management of nuclear forces. The President has nominated a candidate to fill the long vacant office of Assistant to the Secretary of Defense for Nuclear, Chemical, and Biological Defense. The Commander of STRATCOM is taking serious interest in remedying deficiencies in the US nuclear weapons establishment and has formed a new oversight group on nuclear matters from among his most senior staff officers.

Fourth, early in President George W. Bush's administration, the US made strategy statements that highlighted the possibility of US preemption and of preventative war against WMD proliferators. These statements and the call for improved strategic forces that could better implement them have generated widespread confusion and skepticism. As military actions of these kinds should not be taken on the basis of mistaken intelligence, this skepticism has surely been aggravated by the massive intelligence failure that invalidated the primary argument given for invading Iraq – to eliminate its WMD.

Fifth, the US Department of Defense has started new programs to build a replacement for the Trident submarine and to extend the life of the Minuteman missile. It is also working up plans for a new strategic bomber. While the funds being spent so far are relatively modest, spending on these replacement programs will rise to far higher levels as soon as detailed design and then serial production begin.

Sixth, a series of efforts by the Bush Administration to win support for restoration of US capabilities to produce nuclear weapons and to

develop and produce new nuclear warheads failed to win and sustain Congressional support. The Congress has instead called for the development of a comprehensive plan for the future of US strategic forces. As a result, a new Congressional Commission on the Strategic Posture of the United States is now getting started – with former Secretary of Defense William Perry as chairman and former Secretary of Defense James Schlesinger as vice chairman of a commission that includes both supporters of retaining a strong US nuclear deterrent and others inclined to place increased emphasis on nuclear disarmament.

Finally, anti-nuclear activists have begun a well-funded campaign – now called Global Zero – to win high level international support for setting a date by which global elimination of nuclear weapons will be achieved. They argue that the necessary effort to find and implement a safe approach to global elimination will not be made without international agreement on a deadline.

Where the intensifying debate on the future of US nuclear forces will lead is anyone's guess. As noted above, a compromise trading some modernization of US nuclear forces for a substantial additional reduction in their size seems likely.

# Why Must the US Retain Nuclear Deterrent Forces for the Foreseeable Future?

Many experts on nuclear issues both inside and outside government are trying to understand and more clearly articulate why the US needs nuclear weapons for the foreseeable future. The author's effort to do so is summarized in the following four statements.

1) Unilateral nuclear disarmament would be an immoral dereliction of duty by a US government that bears the responsibility for protecting the United States and its allies from attacks on our vital collective interests. Such attacks could be particularly tempting to potential adversaries that have nuclear weapons when we do not.

- 2) Finding a safe way to achieve global elimination of nuclear weapons poses daunting technical-operational problems as well as fundamental problems in international relations. Whether these problems can be solved in the foreseeable future is far from certain.
- 3) Unless and until a safe way to eliminate nuclear weapons globally is identified and implemented, the US needs to maintain safe, secure, and reliable nuclear forces sufficient to achieve the deterrent effects provided by such capabilities.
- 4) Finally, the US and other nuclear states are morally obliged to mount a strong continuing effort to try to find and implement a safe path to zero nuclear weapons.

What then is the nature of the nuclear forces that the US must maintain for the foreseeable future? The remaining sections of this paper touch on questions that must be answered in sizing US nuclear forces, the types of nuclear weapons that would maximize its deterrent efficacy, and finally, a potential new justification for US extended nuclear deterrence guarantees to allies.

### **Numbers of Nuclear Weapons**

US policy is to maintain the smallest possible nuclear deterrent force that is sufficient to protect itself and its allies. There are a variety of good reasons to maintain such a policy. Perhaps the most important political reason is to demonstrate that the US is behaving as consistently as it can with the requirements and goals of the Nuclear Nonproliferation Treaty.

This consideration implies a constant US effort to make its nuclear forces as small as prudence can allow. As how large these forces should be is clearly a matter of judgment, debate on the subject is endless. Some of the specific questions that responsible officials must answer at least implicitly are spelled out below.

- 1) Which nuclear-armed states pose sufficiently dangerous threats to justify deterrence via US nuclear forces? How many of these states should the US be prepared to retaliate against within a period too short to create additional nuclear forces? To what extent might the US be able to count on the nuclear deterrent capabilities of other states that are allied with the US or that have similar strategic interests to contribute to deterrence of these threatening states?
- 2) Which threatening or potentially threatening nuclear-armed states should be subject to the best efforts that the US and its allies can make to establish capabilities to suppress their nuclear forces?
- 3) What strategic effects might contribute most effectively to deterring specific nuclear-armed potential adversaries? And, what combinations of strategic effects seem sufficient to achieve the deterrent effects possible for each nuclear-armed potential adversary? Which types of targets should the US be able to destroy with nuclear weapons to achieve these strategic effects for each of these specific potential adversaries? And, how many nuclear weapons of what types might be needed to destroy what fraction of these targets in order to achieve these strategic effects?
- 4) How large an inventory of non-operationally deployed nuclear weapons should the US retain as a hedge against the need to rapidly expand its operationally deployed nuclear forces or to guard against the discovery of technical failures in components of the operationally deployed nuclear forces?
- 5) How much nuclear infrastructure should the US establish in order to be able to a) steadily renew the US nuclear weapons stockpile, b) dismantle old weapons, c) rapidly replace any type of nuclear weapon discovered to have suffered technical failure,

and d) to rapidly expand its operationally deployed nuclear forces should circumstances require? To what extent should stocks of non-operationally deployed nuclear weapons be reduced in light of the capability to produce new nuclear weapons quickly?

- 6) How many extra operationally deployed nuclear weapons should the US hold to guard against possible losses to adversaries' counterforce and defense capabilities? How many extra weapons should be retained to compensate for less-than-perfect operational reliabilities of information, surveillance, and reconnaissance (ISR), delivery, and weapons systems? How many extra weapons should be kept to meet "overhead" requirements such as weapons in transit, maintenance, or reserved for teardown and component testing?
- 7) How many theater nuclear weapons should the US maintain to support extended nuclear deterrence for allies?
- 8) Finally, how aggressively should the US seek to minimize the numbers of operationally deployed and non-operationally deployed nuclear weapons it maintains? What risks reside in being too aggressive in minimizing numbers and how might they compare with those of not being aggressive enough?

This final question poses the largest judgment. The author notes that there are so far few signs that declining US nuclear forces lack for deterrent effectiveness. But there are also few signs that faster and deeper US nuclear reductions would make North Korea or Iran more willing to abandon their nuclear weapons programs or other states potentially interested in pursuing independent nuclear forces less so.

Finally, this wide scope for judgment in determining the size of the US nuclear stockpile – and other factors as well – suggest that the outcome of the current American nuclear debate will include a compromise

between nuclear hawks and doves that trades substantial further reductions in the size of US nuclear forces for modernization of those that are to be retained.

## Does the US Need New Types of Nuclear Weapons?

As noted above, there is considerable skepticism about the need for the US to create new types of nuclear weapons. Skeptics seem worried that if the US creates new weapons that are particularly effective at destroying an opponent's capabilities to attack the US and its allies with nuclear weapons, the likelihood that the US and its allies would initiate a preemptive attack or a preventative nuclear war would be increased.

This argument seems logical as far as it goes, but does not go far enough. In broad terms, the long-standing norm against nuclear use and visions of the enormous destruction that could result from starting a nuclear war with a less-than-perfect preempt would make taking such an action an extremely daunting proposition for any US president. In order to seriously consider initiating nuclear preemptive or preventative attacks a president would have to have high confidence that doing so would likely save far more lives than would be lost if such attacks were not made.

A president might also have considerable confidence that a less capable adversary would be deterred from initiating nuclear use against the US and its allies. And even if the adversary were not deterred, it might be expected to initiate nuclear use by launching a single weapon or only a few weapons to test US will. Anticipating such a possibility, a president might judge that the US could then respond with damage-limiting attacks that could be nearly as effective as preemption might initially have been. In sum, an American president seems most unlikely to find himself or herself in circumstances where preemption or preventative war with nuclear weapons would seem the prudent course.

Nonetheless, there is a strong case for the US to build improved capabilities for damage-limiting strikes against some potential adversaries' nuclear forces – capabilities that could be employed once the adver-

sary had initiated use of nuclear weapons. Of course, if conventional strike weapons can perform such missions as well or perhaps nearly as well as nuclear weapons, they should be preferred. But currently nuclear weapons still appear to offer considerably higher effectiveness in destroying some types of nuclear or WMD-related targets.

Even more generally, as weapons can be delivered far more precisely to their targets than was possible when the current US nuclear weapons were designed, there is a strong case for building new nuclear weapons with much reduced nuclear yields. Reduced yields would still be able to destroy most types of targets but would cause far less unwanted damage.

There is also a good case for building some new nuclear weapons to support US extended nuclear deterrence guarantees to allies. These weapons should be designed with features that make it essentially impossible for unauthorized parties to make use of them. The designs of these weapons should also make it essentially impossible to recover their nuclear material for use in a radiological "dirty bomb" or for the construction of other nuclear weapons. The weapons could also be designed so as to be deliverable using aircraft that do not have to undergo complex modifications to be capable of nuclear missions.

Finally, the US Departments of Defense and Energy have made a good case that even without any new operational capabilities, building new nuclear weapons would be better than continuing to extend the lives of the aging weapons currently in the US nuclear stockpile. Their case includes arguments to the effect that new weapons can be designed with such large performance margins as to essentially guarantee that they need not be tested to know that they will work. New weapons would introduce modern technology and materials that would make them easier to maintain. New weapons that employ different technical approaches from one class to the next but allow any weapon to be fitted to any delivery system could greatly reduce the number of weapons that must be included in the US nuclear weapons stockpile to hedge against the discovery of technical problems in any particular class of weapon.

The arguments presented in the previous paragraph seem a good case for replacing many of the older nuclear weapons in the US nuclear stockpile. But if new weapons are going to be built, this author believes that there is also a good case for designing new weapons with improved operational capabilities. Reasonable priorities for improved operational capabilities would include:

- 1) Low yield warheads for precision delivery
- 2) Nuclear weapons optimized for support of extended nuclear deterrence
- 3) Low-yield earth-penetrating warheads optimized for minimal radiation fallout
- 4) Low-yield enhanced radiation warheads for damage-limiting attacks against stockpiles of biological agents

This leads us to the last topic of this paper, extended nuclear deterrence guarantees for US allies and the role they may play in preventing future nuclear proliferation.

# **Could Strengthened and Broadened US Extended Nuclear Deterrence Guarantees Help Prevent Additional Nuclear Proliferation?**

The author has recently completed a study of this question. Given that the NATO Allies have been for decades a major recipient of US END guarantees, a review of some of the main arguments developed in the study seems appropriate. Some European experts have been arguing that the end of the Cold War meant the end of any requirement for nuclear programs of cooperation between the US and NATO Allies. Perhaps so, but the need for END guarantees in some form that explicitly involves at least some NATO allies seems likely to remain for the foreseeable future, and may even increase, especially if Iran continues to pursue nuclear weapons.

The basic line of argument for strengthened or expanded US END guarantees to prevent future nuclear proliferation is that proliferation by rogue states may frighten other states and motivate them to pursue their own nuclear deterrents. But some of these frightened states may be will-

ing to accept US extended nuclear deterrence guarantees instead. This would be a gain for the nuclear non-proliferation interests of the US and its allies. It would work to minimize the number of independent nuclear deterrents, and fewer weapons would likely be created than might be the case if potential proliferators were to go ahead with their own nuclear weapons programs.

But providing such guarantees has different implications today than it did early in the Cold War. The most important implication derives from US security policy calling for minimizing the chances that the US would ever have to actually use nuclear weapons. In order to minimize these chances, the US would have to provide prospective END recipients with strong conventional defenses that would keep the burden of nuclear escalation on any adversary that tried to attack a recipient. The US would also want to make escalation by the adversary as daunting a prospect as possible. Recipients of US END guarantees would also surely want strong missile and air defenses.

These kinds of requirements imply that providing US END to a state would mean making it a recipient of all the benefits of full alliance with the US. As current allies generally already receive such benefits while states that are not US allies do not, strengthening US END guarantees to current allies will generally be easier and less costly for the US than expanding US END guarantees to states that must be made full allies.

Perhaps more important, strengthening US END guarantees to current allies implies making marginal changes to the likelihood that the US would become involved in and suffer the consequences of nuclear war. Further, the goal of such strengthening would be to make these likelihoods go down. In contrast, expanding US END guarantees to states being taken on as new allies implies accepting new risks of becoming involved in nuclear war as a result, albeit minimized to the extent possible.

In sum, the arguments of the previous two paragraphs imply that the US should find strengthening END guarantees to current allies considerably less costly and risky than expanding such guarantees to states that have not been close allies. We should thus expect to see more of the former than the latter.

States considering whether to accept strengthened or expanded US END guarantees have their own general pros and cons to consider. On the pro side, they would be getting nuclear protection that is likely to be superior to that which they could build in national nuclear weapons programs. They would share the risks of nuclear deterrence and possible use with the US, likely resulting in smaller risks than they would face in defending their interests with their own nuclear weapons. And promises of such guarantees implemented only when clearly necessary would allow them to forego getting committed to expensive and risky independent nuclear programs well before the need might have become clear.

On the con side, potential recipients of US END guarantees would forego the opportunity for an independent security policy, some status, and possibly some accolades from their citizens. They would inevitably have some doubt about whether the guarantees they receive are completely credible. And they would likely have to accept significant permanent deployments of US forces on their territory. On balance, it seems likely that some potential recipients of strengthened US END guarantees could prefer to establish their own nuclear deterrent forces, and require substantial convincing to do otherwise.

Looking to the proliferation concerns currently most relevant for Europe, if Iran establishes nuclear-armed strike forces, many Middle East and Persian Gulf states may want desperately to get nuclear protection somehow, and extended nuclear deterrence arrangements of some kind to at least some of those states would be a logical answer.

Working out prospective extended nuclear deterrence arrangements for vulnerable Middle East and Persian Gulf states sooner rather than later, and making Iran aware that they would be implemented if needed, may help clarify for Iran that nuclear weapons would not give it a free

hand in that region. Instead, Iran's acquisition of nuclear weapons would draw the US and other powers more deeply into the region and create END arrangements to counterbalance Iran's nuclear forces.

This raises some important questions. Specifically, who should provide END guarantees to the Middle East and Persian Gulf states threatened by a future nuclear-armed Iran? Should it be the US on a bilateral basis? Should the US provide such guarantees as part of a new alliance among the recipient states? Should END guarantees be provided to these states somehow through NATO? And to the extent that some NATO states such as perhaps Turkey become interested in strengthened END guarantees from the US, should such changes be reflected in END changes for NATO as a whole?

It seems likely that the next year or two will see some major changes in the planned evolution of US nuclear forces. The outcome cannot be predicted with any precision, but it seems likely that substantial further reductions and perhaps some of the other measures long sought by the nuclear nonproliferation community will be adopted. This will be balanced by adoption of some programs to modernize the nuclear infrastructure, weapons, and delivery systems that will be needed to maintain a minimal nuclear deterrent judged adequate to protect the interests of the US and its allies for the foreseeable future.

# GREAT POWER DETERRENCE RELATIONSHIPS: RUSSIA, THE UNITED STATES AND EUROPE

## Isabelle FACON\*

Deterrence is nuclear above all for the Russian leadership, even though it has recently focused increasingly on non-traditional threats (including terrorism, drug trafficking, and information threats)<sup>1</sup>. The key importance of nuclear deterrence for Russia has been demonstrated by various dimensions of its defense policy since the early 1990s. This includes Moscow's commitment to modernize its strategic forces, even in the harshest budgetary times of the post-Soviet period. On the doctrinal front, Russia has since 1993 explicitly rejected the no-first-use principle. A lowering of the threshold for the use of nuclear weapons is also visible in various Russian doctrinal documents. This has been illustrated by the ongoing discussion on — and training for — "calibrated" use of nuclear weapons with a pre-determined level of damage for the de-escalation of a conventional conflict.

It should also be noted that the emphasis on the nuclear factor fits well with Vladimir Putin's effort to reconcile Russia with its past achievements, including technological and security investments. The former Russian president has consistently insisted that there are many things in the Soviet legacy that the Russians should be proud of, and take advantage of, in the effort to restore a great power status for their country. This

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<sup>&</sup>lt;sup>1</sup> Some experts in Moscow, including serious people like Andrey Kokoshin, a former Security Council secretary, have mentioned a triad to fight terrorism, including nuclear forces together with conventional and special forces ("Russia Setting Up New Triad for Combating Terrorism – Lawmaker," Interfax-AVN, 24 December 2002). But it has proved difficult to find much substantive information about this angle of the current strategic debate in Russia.

approach has been used for space capabilities and for military power, including nuclear weapons. In both fields, one of the mottos of Vladimir Putin has been to demonstrate that the potential that Russia has inherited from the USSR constitutes a valuable asset that now helps Russia fully take its place on the world scene<sup>2</sup>.

This nuclear focus, which was noted in the 2008 National Defense Strategy of the U.S. Department of Defense<sup>3</sup>, is unlikely to vanish in the foreseeable future. The current discussion on the review of the Russian Federation's military doctrine, underway since 2005, has been an expression of this as it has suggested, among other things, that "nuclear weapons will retain their current role" and that Russian officials and experts perceive that there are "significant threats to Russia's interests and security, including threats from the United States, that [warrant] continued reliance on nuclear deterrence"<sup>4</sup>. A draft of a new "white book" by the Russian Ministry of Defense, leaked in the Russian press in August 2008, apparently, and unsurprisingly, says that the nuclear triad will remain the core of the Russian armed forces for the next two decades, and that Russia will continue to maintain a strong nuclear capability as a reliable deterrent of potential threats<sup>5</sup>.

In this context, the United States' distancing itself from the traditional bilateral arms control and disarmament architecture — notably by withdrawing from the ABM Treaty — and its plans in the field of missile defense have been met with a strong negative reaction in Moscow, which

<sup>2</sup> By contrast, in the Yeltsin era, the Russian political leadership had tended to underrate the importance of these Soviet legacies as it was widely claimed that the collapse of the USSR owed much to excessive investments in these strategically and ideologically important fields.

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<sup>&</sup>lt;sup>3</sup> "Moscow has signaled an increasing reliance on nuclear weapons as a foundation of its security", the document stresses, saying that this is one of the actions that "suggest a Russia exploring renewed influence, and seeking a greater international role." National Defense Strategy, Washington, D.C.: U.S. Department of Defense, June 2008, p. 4.

<sup>&</sup>lt;sup>4</sup> This appeared clearly during a conference on the future military doctrine that took place in January 2007 under the auspices of the Russian Academy of Military Sciences in Moscow. See Nikolai Sokov, "Russian Academy of Military Sciences Debates Role of Nuclear Weapons in Conference on New Military Doctrine", *WMD Insights*, March 2007 (<a href="https://www.wmdinsights.com">www.wmdinsights.com</a>).

<sup>&</sup>lt;sup>5</sup> "Russia Prioritizes Nuclear Triad, Hi-Tech Weaponry in Future Wars", RIA Novosti, 1 August 2008. The draft document is titled "The new physionomy of the Armed Forces of the Russian Federation" (Novyi oblik Vooruzhennykh sil Rossiyskoy Federatsii).

sees these developments as highly disturbing and as a source of vulnerability<sup>6</sup>. As with many other issues where its objectives diverge from Washington's, the Kremlin, in order to promote its interests, has been trying to play the "European card". This has created serious problems and dilemmas in the already tense EU-Russia relationship.

### Nuclear deterrence for Russia: an existential and multifunctional tool

There are plenty of factors that will keep the Russian focus on nuclear weapons alive for a long time ahead. Even though Russia does not expect a large-scale conflict to take place, it feels threatened from many directions and vulnerable given the state of its armed forces. As Russian security expert Dmitri Trenin sums up, "Even in the absence of credible external threats of appropriate caliber, this [the possession of nuclear weapons] works to reassure the high command and the political leadership that the country is adequately protected against any hypothetical large-scale attack". Even though the Russian military budget has steadily increased since the early 2000s, the situation in the conventional forces is not going to improve rapidly nor easily given the enduring destructive impact of the crisis that the army lived through in the 1990s and the real state of the defense industry.

In addition, keeping U.S. military power in check and correcting the imbalances in Russia-U.S. relations remain key objectives of Russian foreign and security policy. In this perspective, nuclear deterrence is and will remain an essential tool. For Russia, keeping a credible nuclear deterrent is a matter of making the military balance with the United States less uneven<sup>8</sup>. The

<sup>&</sup>lt;sup>6</sup> On this issue, see Isabelle Facon, "A 'New Strategic Framework' for Russian–American Relations?", in Fondation pour la Recherche Stratégique, *French Strategic and Military Yearbook 2002-2003*, Odile Jacob Editions, 2003, pp. 39-54.

<sup>&</sup>lt;sup>7</sup> Dmitri Trenin, "Russia's Nuclear Policy in the 21st Century Environment", *Proliferation Papers*, IFRI Security Studies Department, Autumn 2005, p. 7.

<sup>&</sup>lt;sup>8</sup> Russian leaders often mention the gap between the size of the national defense budgets of Russia and the United States. From a "qualitative" point of view, Russian strategists have emphasized the danger posed by U.S. high-tech weapons that could have a strategic impact – i.e., be used against Russian strategic targets. From this point of view, one should not underestimate the deep impact that the NATO operation in the Balkans in 1999 (*Allied Force*) has had on the world vision of Russian *élites*. Even now, almost ten years later, one can find quite a number of Russian officials and experts that say that if Russia had not been armed with nuclear weapons, it would certainly have suffered the same fate as Serbia in the context of the Chechnya wars.

emphasis on nuclear weapons is also very much about guaranteeing Russia's strategic independence from Washington despite the blatant asymmetries between the two countries in power tools, both military and economic. Nuclear deterrence is viewed in Moscow as a guarantee against possible U.S. political pressure, which the Russians see as a highly plausible possibility given Washington's unilateralist moves and its increasing interventionism in recent years.

Also, the nuclear status and potential serve well Russia's traditional global ambitions, which this country has never abandoned and for which a more or less balanced partnership with the United States is a key precondition. In its effort to present itself as a key world power, Moscow likes to say that its nuclear weapons are a global stabilizing factor since Russia, through its nuclear deterrence policy, is theoretically able – so it wants to believe – to exert some restraining pressure on U.S. policy, a circumstance which Russian leaders present as positive for the international community, faced with the destabilizing consequences of American unilateralism. More generally, so far neither Russia's world economic and trade positions nor its capability to project force are sufficient to allow it to justify fully its claim that it is a power with global reach. As a result, the nuclear factor is one of the few elements that support this claim. It is in this very same perspective that Russia frequently stresses that as the second biggest nuclear power it shares with the United States a special security responsibility on the world stage. More indirectly, its ability to provide its allies with the protection of its nuclear umbrella has been an asset in Russia's keeping its credibility as a military protector of the former Soviet republics within the Collective Security Treaty Organisation<sup>9</sup>, thus in its retaining some political authority over them. This also is crucial to Russia's international ambitions since keeping a predominant influence in its former empire, as demonstrated by its fierce opposition to Ukraine's and Georgia's joining NATO, is seen in Moscow as a precondition for the realization of its aspiration to global power status.

<sup>9</sup> This organization includes Russia, Belarus, Armenia, Kazakhstan, Kirghizstan, Uzbekistan, and Tajikistan.

Another factor that will, in the foreseeable future, confirm Russia's emphasis on nuclear weapons is that it feels it needs to deter not only the United States but also other states, including the new and potential nuclear powers that are located close to its territory. In addition, Russian policy towards China contains "an element of nuclear deterrence, even if well-camouflaged and discreet" 10, as the bilateral power equation with Beijing is overall not very favourable for Russia, except in the military field, and more particularly in the nuclear component.

Thus, while for Washington the strategic nuclear relationship with Moscow is no longer as central as it used to be, for Russia the nuclear balance with the United States in particular, and the credibility of the nuclear deterrent in general continue to be quite high on the security agenda. As viewed from Moscow, nuclear weapons are about security, sovereignty and status as a great power – all factors that proved to be driving forces in Russian foreign policy under Putin, and that obviously will remain so under President Medvedev. It is important to underscore here that Russia's increasing reliance on the nuclear factor concerns non-strategic nuclear weapons (NSNW) as well. In contrast with NATO, Russia has not downplayed the importance of such weapons<sup>11</sup>. Moscow sees them as important resources for compensating for the relative weakness of its conventional armed forces. Russian strategists have developed the concept of calibrated nuclear strikes aimed at discouraging a military adversary from continuing its attack against Russia in a situation in which the latter's armed forces have proved unable to stop the aggression. Such strikes are supposed to cause the adversary a "set" or "required" or "pre-determined" (not "unacceptable") level of damage that will convince him to stop the attack. This is what Russian strategists call the "de-escalation" of a conventional con-

<sup>10</sup> Dmitri Trenin, "Russia's Nuclear Policy in the 21st Century Environment", op. cit., p. 10.

<sup>&</sup>lt;sup>11</sup> See Rose Gottemoeller, "Elimination of Short-Range Nuclear Weapons Designed to Be Forward Deployed", *Reykjavik Revisited*, Hoover Press, forthcoming; Isabelle Facon et Bruno Tertrais, "Les armes nucléaires 'tactiques' et la sécurité de l'Europe", *Recherches & Documents*, Fondation pour la Recherche stratégique, 2008 (www.frstrategie.org).

flict<sup>12</sup>. Most Western and Russian experts agree that this approach leaves a significant role for NSNW.

# Russia fighting uncertainty and dynamism in the international nuclear policy landscape

Attached as it is to traditional nuclear deterrence, Moscow has proved eager to try to preserve stability and transparency in the international nuclear policy landscape. Despite all the nuclear muscle flexing over the past years (including highly publicized tests of old and new ICBMs and the renewal of strategic bomber patrols), it does not want to be driven to invest too much in its nuclear arsenal. The Russian leadership, while determined to strengthen the national military tools, has many other priorities to tackle, and has kept reiterating that it does not want to repeat the mistakes of the past through overinvestment in defense to the detriment of social and economic programs. Russian officials and experts often call for an agreement with the United States on the reduction of strategic nuclear arsenals to 1,500 deployed warheads, which indicates Moscow's lack of both financial resources and political will to accelerate the rate of production of new strategic missiles (currently 5 to 7 Topol-M ICBMs a year<sup>13</sup>). In this sense, this country does not have the same flexibility as the United States has to "tailor" its nuclear forces – even though, objectively, the collapse of the START II treaty and the signing of the Strategic Offensive Reductions Treaty (SORT) have both allowed Russia to determine independently the struc-

<sup>&</sup>lt;sup>12</sup> This notion was conceptualized in an article in a Russian MoD review (V. I. Levshin, A. V. Nedelin, M. E. Sosnovskiy, "O primenenii yadernogo oruzhiya dliya deeskalatsii voennykh deystviy", *Voennaya Mysl'*, n° 3, May-June 1999, pp. 3437). This notion also appears in the 2003 "White Book" of the Russian Ministry of Defense: de-escalation of aggression is "forcing the enemy to halt military action by a threat to deliver or by actual delivery of strikes of varying intensity with reliance on conventional and (or) nuclear weapons" (Aktual'nye zadachi razvitiya vooruzhennykh sil Rossiyskoy Federatsii [Actual Goals of the Development of the Armed Forces of the Russian Federation], Russian Ministry of Defense, October 2003, p. 70). One might also recall the scenario of the Zapad (meaning "West") military exercises conducted in 1999, when the Russian forces simulated a NATO attack on the Russian territory of Kaliningrad. In this scenario, when the Russian army did not succeed in repelling the adversary, it resorted to limited use of nuclear weapons to stop the attack. <sup>13</sup> According to Alexei Arbatov and Rose Gottemoeller, in "New Presidents, New Agreements? Advancing U.S.-Russian Strategic Arms Control", *Arms Control Today*, July-August 2008.

ture of its nuclear forces<sup>14</sup>. This is why Russia remains interested in arms control and any measures that will codify approximate equality with the United States in nuclear capabilities.

While Russia has renounced the ambition to maintain a strict numerical nuclear parity with the United States, it remains strongly interested in "qualitative parity". In other words, Moscow intends to maintain the traditional deterrence relationship and nuclear balance with the United States. As a consequence, the Russian leadership is profoundly upset by any move – political or technological – that introduces elements of uncertainty and dynamism in the international nuclear policy landscape, and reduces its levers on U.S. nuclear policy. That includes the distance taken by the United States from the traditional bilateral arms control architecture and the Pentagon's pursuit of missile defense programs.

Moscow has been trying hard to oppose the Bush administration's explicit disaffection with formal bilateral arms control measures. It was only because Russia proved supportive of the United States in the wake of the 11 September 2001 terrorist attacks that the Administration agreed to sign a formal arms control treaty with Russia (the SORT treaty also known as the Moscow Treaty). Therefore, "in the rather brief negotiations for the minimalist Moscow Treaty in 2001-2002, Russia managed to obtain the form it wanted — a legally-binding treaty". However, "the U.S. basically dictated the content" 15. For this reason, Russia has never been completely satisfied with this treaty, and as tensions have been growing since 2001 in Russian-U.S. relations 16, Moscow has been pushing for a treaty that would be much more precise and constraining than SORT in the post-START I

<sup>&</sup>lt;sup>14</sup> The collapse of the START II treaty enabled Russia to keep its MIRVed ICBMs. Article 1 of the SORT Treaty of 24 May 2002 says that "Each Party shall determine for itself the composition and structure of its strategic offensive arms, based on the established aggregate limit for the number of such warheads".

<sup>&</sup>lt;sup>15</sup> Jenifer Macby & Edward Ifft, "The End of START?", Washington Post, 20 April 2007.

<sup>&</sup>lt;sup>16</sup> Among the events that have caused these tensions to develop one should mention the Iraq war, the colored revolutions in Georgia and Ukraine, the proposed U.S. missile defence deployments in Poland and the Czech Republic and Washington's support for Kyiv's and Tbilisi's joining NATO.

context<sup>17</sup>. In the Russian view, such a treaty should certainly be less detailed than START I, but it should establish new ceilings for both weapons and delivery vehicles, and be legally binding. Moscow also wants the issue of the bilateral imbalance in reserve arsenals to be handled in any negotiation on the post-START I future. In addition, the new treaty, the Russians stress, should include inspection and verification mechanisms, which the Russian side views, together with the corresponding bilateral dialogue and interaction, as means to keep a closer eye on the evolution of U.S. nuclear forces, and to compensate partly for the flexibility that the United States has – and that Russia does not have – in terms of "tailoring" nuclear forces. It is quite interesting, by the way, to see Russia advocate binding treaties at a time when its foreign policy discourse is increasingly centred on the notions of freedom of action, strategic autonomy, and diplomatic independence.

Since the 1990s, Russia has been working to avoid any break-through in the development of missile defences, owing to a belief that such defences could erode the whole rationale of mutual deterrence, and compromise the traditional balance between offense and defense capabilities. Some prominent and influential Russians seem to fear that U.S. missile defense technology, though clearly not mature yet, is superior to that available to Russia, and/or that the United States has a superior economic potential to exploit BMD technology. In other words, these Russians fear that over the longer term the United States may gain a strategic advantage beyond Russia's grasp. This is why Moscow long resisted Washington's desire to abandon the ABM Treaty, which the United States finally did in December 2001<sup>18</sup>. Since then, in its nuclear weapons programs, Russia has focused on systems that are supposed to enable Moscow to overwhelm any U.S. missile defence. The Russian leadership has also been fiercely trying

<sup>&</sup>lt;sup>17</sup> The START I Treaty is due to expire in December 2009. Its confidence and verification measures are supposed to serve for monitoring the implementation of the SORT treaty. However, the latter runs until 31 December 2012. Therefore the failure to devise follow-on arrangements would leave SORT without verification procedures.

<sup>&</sup>lt;sup>18</sup> Another reason for the Kremlin's resistance has been its concern that U.S. missile defence efforts may entice the Chinese to enlarge their own strategic nuclear arsenal, thus narrowing the strategic gap with Russia.

to prevent the deployment of the "third site" of the U.S. missile defence system, which would include ten interceptor missiles in Poland and a radar installation in the Czech Republic. This has, among other things, led to tensions between Russia and its European partners, as the former has tried to enlist the latter in its effort to put a brake on the increasing dynamism of Washington's strategic policy.

## Russia's commitment to traditional deterrence: the impact on Europe

Russia's strong commitment to a rather traditional, conservative vision of deterrence and to the centrality of nuclear weapons in its defense policy has affected Europe-Russia relations in several ways. Indirectly in the first place: the energy that Russia has been spending on trying to keep its traditional strategic relationship with the United States alive is energy that has not been available for strengthening the Russian-European partnership in general, and Russia-"new Europe" relations in particular. One consequence of this lies in the intensity of the controversy over the proposed U.S. missile defense in Poland and the Czech Republic: it is quite possible that the Russian position would not have been that tough if the systems were to be deployed in states other than former Warsaw Pact countries with which Russia's relations have markedly deteriorated since the collapse of the Soviet bloc. This political hurdle has been heightened by Moscow's clinging to what many in Europe perceive as Cold War symbols and attributes (for example, the "nuclear balance of terror" rationale), which has reinforced, in many European countries, an image of Russia as a past-oriented, frustrated, and thus potentially threatening power. This of course has not been conducive to developing more confident and stable Russian-European relations.

It is only logical that Russia has been trying to get direct or indirect support from European governments on the U.S. missile defense plans, since several of them question the necessity and feasibility of the planned missile shield. But certain of the Russian responses to the various factors and dimensions of the alteration of the traditional deterrence relationship with the United States have introduced elements of militarization in Europe-Russia relations. Many of the "asymmetric" responses to the U.S. missile defense plans in Europe that Russia has been putting forward

in recent months<sup>19</sup> would, if realized, have a direct impact on European security. Russia has not only argued that the U.S. missile defence systems have nothing to do with the security of NATO's European members and that they would, on the contrary, augment the threat to Europe by creating "an additional stimulus for the arms race in the Near East and in North Africa"20. Moscow has also threatened to point missiles at the countries that will host the American missile defence systems. In addition, highlevel officials have said that Russia would envision withdrawing from the INF treaty and resuming production of short and intermediate range missiles, which has brought back some of the atmosphere that prevailed during the crisis of the "euromissiles" in the early 1980s. There are also repeated rumours that Russia may give up the Presidential Nuclear Initiatives on non-strategic nuclear weapons of 1991-92, or at least redefine the nature of these commitments, or decide to deploy non-strategic nuclear weapons in Kaliningrad<sup>21</sup> or in Belarus. This prospect appears all the more disturbing because Moscow has already sent a strong message that it is prepared to withdraw from arms control commitments by announcing, in 2007, a moratorium on its implementation of the CFE treaty. This is problematic for European security, and possibly connected with the U.S. plans to deploy missile defence elements in Poland and the Czech Republic in that Russia may decide to deploy more conventional forces in locations from which it could threaten the new military sites.<sup>22</sup>

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<sup>&</sup>lt;sup>19</sup> Russia's reliance on so-called asymmetric measures is presented by Russian leaders as a reflection of their goal of not getting into a new arms race that would be harmful to its internal development. (See, for example, Sergey Lavrov, Ministry of Foreign Affairs, "Strategitcheskaya stabil'nost' ne mozhet ostavat'siya eksklyuzivnoï oblast'yu rossiysko-amerikanskikh otnocheniy" [Strategic Stability Cannot Remain an Exclusive Sphere of Russian-American Relations], Interview, *Indeks bezopasnosti*, n° 3 (86), Tom 14, p. 13.) However, Moscow has not put only negative options on the table. It has also proposed the establishment of a global missile defence system that would include Russia, the United States and Europe, joint ballistic missile threat assessment, and joint use of the Gabala radar in Azerbaijan and of another radar based in Armavir, Russia.

<sup>&</sup>lt;sup>20</sup> See Yuriy Baluevskiy, then head of the Russian General Staff, "PRO Soedinennykh Chtatov: chto dal'che ?" [U.S. Antimissile Defenses: What About the Future?], Agency of Federal Studies, www.FLB.ru, 26 July 2006 (last accessed: July 2008).

<sup>&</sup>lt;sup>21</sup> Actually, there are already concerns within NATO about Russia's possibly maintaining nuclear weapons in this Russian region, which is sandwiched between Poland and Lithuania.

<sup>&</sup>lt;sup>22</sup> Alexander Nikitin, "New Old Agenda: Current Nuclear Disarmament Concerns", Conference Revitalizing Nuclear Disarmament: Policy Recommendations of the Pugwash 50<sup>th</sup> Anniversary Workshop, Pugwash, Nova Scotia, 57 July 2007.

The issue of Russian NSNW, which is a serious concern for Europeans, seems to be instrumentalized by Russia in its effort to get the United States to heed its proposals about the post-START I future. Firstly, Russian military experts consider these weapons a factor that helps to correct the growing numerical gap between Russia and the United States in strategic nuclear weapons.<sup>23</sup> Moreover, this issue appears as one of the cards Moscow can play in the context of its negotiations with Washington on strategic problems, since U.S. officials in both the Republican and the Democratic parties have expressed an interest in engaging Russia on the issue of arms control measures for this category of weapons. In May 2008, John McCain said, "In close consultation with our allies, I would also like to explore ways we and Russia can reduce – and hopefully eliminate – deployments of tactical nuclear weapons in Europe"<sup>24</sup>.

The Russian threats about their arms control commitments have so far remained hypothetical prospects, and the Russians would certainly weigh the unavoidable political, security and economic risks that they would face should they decide to make one of these threats (regarding the INF treaty, missile targeting, or non-strategic nuclear weapons) a reality. But at any rate, reinstating the utility and prominence of such tools cannot be conducive to a better security climate in Europe. In addition, the Russian public diplomacy posture is confusing, adding to the Europeans' feeling of vulnerability in the face of Russia's new assertiveness. Indeed, these hints regarding the INF Treaty and the PNIs began in the late 1990s and long predate the U.S. proposal to base BMD system elements in Poland and the Czech Republic<sup>25</sup>. In addition, these same non-strategic nuclear systems are viewed by the Russian military as key assets for deterring China and other potentially hostile powers in Russia's neighbourhood.

<sup>&</sup>lt;sup>23</sup> Nestrategitcheskoye yadernoye oruzhiye – problemy kontroliya i sokrachtcheniya [Non-strategic Nuclear Weapons– Problems of Control and Reduction], by A.S. D'iyakov, E.V. Miyasnikov, T.T. Kadyshev, Center for Arms Control, Energy and Environmental Studies, Moscow Institute of Physics and Technology, 2004, p. 3.

<sup>&</sup>lt;sup>24</sup> Remarks by U.S. Senator John McCain on Nuclear Security, 27 May 2008, available at <a href="http://www.johnmccain.com/Informing/News/Speeches/e9c72a28-c05c-4928-ae29-51f54de08df3.htm">http://www.johnmccain.com/Informing/News/Speeches/e9c72a28-c05c-4928-ae29-51f54de08df3.htm</a>

 $<sup>^{25}</sup>$  See David Yost, "Russia's Non-Strategic Nuclear Forces", International Affairs, Vol. 77, n° 3, July 2001, pp. 544-545.

Therefore it is not easy to understand whether, when Russia puts its NSNW and INF commitments into question, it "just" wants to use this as another bargaining chip to try to bring the United States to discuss the future of nuclear arms control and of the bilateral nuclear balance in a way that will best advance its interests, or whether it really intends to widen its military options in connection with other perceived security problems.

At any rate, it appears that Russia's strategy to try to mobilize the Europeans against the U.S. initiatives that, Moscow argues, would undermine the traditional bilateral strategic balance has failed. While initially the "German, Polish, and other European governments [had] indicated that Russian opposition to U.S. BMD policies made them uneasy about endorsing the plans", and while some European officials say off the record that the Russian position and objections on the issue can be deemed sound on the substance<sup>26</sup>, Russian threats and pressures have certainly encouraged NATO's European members to finally "recognise the substantial contribution to the protection of Allies from long-range ballistic missiles to be provided by the planned deployment of European-based United States missile defence assets"<sup>27</sup>. This failure may well push Moscow to stiffen its positions further.

### Conclusion

The potential for destabilization of the security situation in Europe is far from negligible, even if thus far Moscow has refrained from implementing most of the "asymmetric" responses to Washington that would have an impact on European security. The European Union has urged Russia and the United States to actively negotiate a post-START I treaty and a verifiable agreement to achieve the greatest possible reductions in non-strategic nuclear weapons<sup>28</sup>. The EU has also indicated, in substance, that it does not want to be a hostage of the divergence in policies between

<sup>&</sup>lt;sup>26</sup> Richard Weitz, "U.S. BMD Plans Gain NATO's Endorsement but Not Russia's", *WMD Insights*, June 2008; "US Missile Defense: A Strategic Challenge for Europe", *CSS Analyses in Security Policy*, Vol. 2, n° 12, April 2007.

<sup>&</sup>lt;sup>27</sup> Bucharest Summit Declaration Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Bucharest on 3 April 2008, paragraph 37.

<sup>&</sup>lt;sup>28</sup> See Alexander Nikitin, "New Old Agenda: Current Nuclear Disarmament Concerns", op. cit.

the United States and Russia on strategic matters, even if some member states are affected in one way or another. This is NATO's business, the European Union would say. Russian pressures related to proposed U.S. missile defence deployments in Poland and the Czech Republic have not been fruitful, and have even had a result contrary to what Moscow sought (i.e., the Bucharest NATO summit declaration, and the signing of bilateral agreements between Washington and Warsaw and Prague in summer 2008). With such an ambivalent posture, the Europeans probably indicate, in addition to their internal divisions on a number of foreign and security policy issues, that they find it difficult sometimes to locate their rightful place in the triangle with Moscow and Washington.

A change in mutual perceptions at the Russia-U.S. level is certainly a necessary condition to avoid a recurrence of such situations in Russian-European relations. The Russian posture – focused as it is on preserving the traditional nuclear balance with the United States – has not helped such a change to take place. Nor has Moscow been encouraged to undertake such a change. The United States may not be as interested as Russia is in maintaining this traditional relationship, but the fact is that Washington continues to preserve a massive, actively deployed deterrent capability directed against Russia. The discussion in the United States about American nuclear primacy has not gone unnoticed in Russia<sup>29</sup>, and has only made Moscow more determined to ensure that the nuclear balance remains stable – not more willing to consider that nuclear weapons should be put into the background. Strengthening the Russian-American relationship in fields other

<sup>&</sup>lt;sup>29</sup> Russia, like China, tends "to interpret the 2001 Quadrennial Defense Review and Nuclear Posture Review as signaling a desire to create the kind of military capabilities that would allow the United States to coerce and confront even nuclear-armed major powers" and an effort by Washington to try "to escape the nuclear balance of power." (Brad Roberts, "Great Power Deterrence Relationships in the Early 21<sup>st</sup> Century", Discussion paper prepared for a conference on NATO and 21<sup>st</sup> Century Deterrence: New Concepts, Capabilities, and Challenges, NATO Defense College, Rome, April 29-30, 2008). This concern has also been expressed in Russia in connection with Keir A. Lieber's and Daryl G. Press's article "The Rise of U.S. Nuclear Primacy", Foreign Affairs issue of March-April 2006, which Russian military experts have interpreted as a direct reflection of Pentagon views on the issue despite the very negative reaction that this paper received in the DoD. U.S. officials such as Peter C.W. Flory, then the Assistant Secretary of Defense for International Security Policy, rejected the Lieber-Press analysis as riddled with factual and analytical errors. See Flory's response to the Lieber-Press article in the September/October 2006 issue of Foreign Affairs.

than strategic and security issues (for example, in trade and economics) may help. However, the situation seems less conducive than ever to such a positive evolution, given the cold wind that has been blowing in Moscow-Washington relations since the Georgia crisis in the summer of 2008.

This is problematic. At a time when Westerners reflect on evolving notions and concepts of deterrence<sup>30</sup>, Russia, which, as we have emphasized in this paper, has not modified significantly its strategic thinking and is not inclined to redefine its concepts as much as the West is, is at best sceptical, at worst suspicious about new conceptual approaches. In other words, Russia is certainly quite perplexed about what it may perceive as the absence of a clear conceptual framework and even as ambiguity "on the other side". For the situation to remain more or less stable, we should avoid any further misunderstandings on such crucial issues. This in turn calls for more information exchanges, more transparency and, probably, a dose of formal arms control. In September 2008, the situation was not, unfortunately, auspicious. Due to the war in Georgia, the Bush administration was considering suspending the talks with Russia on missile defence and nuclear disarmament, and the activities of the NATO-Russia Council had been frozen. It remains to be seen whether the future new U.S. Administration will offer an opportunity to redefine the global framework of deterrence.

<sup>&</sup>lt;sup>30</sup> This is demonstrated, for example, by the series of workshops dealing with "tailored deterrence" under the auspices of NATO and the U.S. Defense Threat Reduction Agency.

# GREAT POWER DETERRENCE RELATIONSHIPS IN THE EARLY 21<sup>ST</sup> CENTURY

### Brad ROBERTS\*

In NATO's landscape of deterrence concerns, how important is the great power dimension today? How important might it become in the future? Does deterrence remain a fundamental organizing principle in great power relations? And how do answers to these questions matter to NATO?

Before sketching out some hypotheses on each of these topics, it is useful to reflect on the precise cast of states represented with the term "great powers." This term is in wide usage, with the apparent assumption that there is general agreement about the cast of great powers. But this seems less true than before. In the middle of the 20th century, the answer was clear enough. But the cast has changed and is changing, with some rising powers, some aspiring but not rising powers, some whose actual power seems less impressive than self-image might suggest, and some that seem uncertain of their future role. This short paper focuses on the relations among the United States, Russia, and China. A richer answer to the questions posed here would result from a broader scope of analysis, but that is beyond the scope of this initial assessment.

Whatever the answers of the transatlantic community to the questions posed above, it is important to note that China and Russia have clear answers to these questions. Deterrence remains central to both of their worldviews. This is not simply because of the potential military flashpoints in the Taiwan strait or the Russian "near abroad." Rather, taking a

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longer historical view, analysts in both China and Russia are profoundly wary of life in a unipolar world. They view "the world's only superpower" as an essential partner but also as a sometimes rogue hegemon. Moreover, many in China and Russia perceive the United States as increasingly meddlesome in their domestic affairs and indeed tempted to inflict larger insults on their sovereignty. This perception has something to do with the end of the bipolar order which, in their assessment, ended the counter-balancing of U.S. power. It also has something to do with their reading of the U.S. strategic personality, which, in their view, is driven to impose a democratization vision upon one and all. The result is a deep wariness of an America they see as unpredictable and a strategic relationship fraught with risk. Neither Russia nor China relishes being the target of U.S. deterrence strategies, which they tend to see as more coercive than benign. Accordingly, the Chinese eschew the word "deterrence" to describe their strategy and instead write of "counter-deterrence" as the guiding principle of their strategic military posture.<sup>2</sup>

Leaders and experts in China and Russia argue, moreover, that effective deterrence of the United States is growing ever more problematic. They tend to interpret the 2001 *Quadrennial Defense Review* and *Nuclear Posture Review* as signaling a desire to create the kind of military capabilities that would allow the United States to coerce and confront even nuclear-armed major powers. These leaders and experts worry that the United States seeks to escape the nuclear balance of power—and they read the 2002 *US National Security Strategy* as providing confirmation of this intent. (Few Americans take this as a serious possibility, though there is a small but intense American debate on this matter.) Hence both China and Russia are deeply committed to retaining an ability to put the United States at risk by nuclear means and to credibly counter its threats to escalate in time of crisis and war. Each has invested substantial resources in a pro-

<sup>&</sup>lt;sup>1</sup> On China, see for example, *China Reconsiders Its National Security: "The Great Peace and Development Debate of 1999"* (Alexandria, Va.: Center for Naval Analyses Corporation, 2000) and Michael Pillsbury, ed., *China Debates the Future Security Environment* (Washington, D.C.: National Defense University, 2000).

<sup>&</sup>lt;sup>2</sup> For insights into basic Chinese strategic concepts, see Peng Guangqian and Yao Youzhi, editors, *The Science of Military Strategy* (Beijing: Military Science Publishing House, 2005).

gram of strategic military modernization, which they describe as stabilizing in the context of efforts by the United States to "transform" its strategic military toolkit with the New Triad. Each also maintains the ability to strike by nuclear means at U.S. allies and friends. China is also modernizing and expanding its strategic forces, as Russia debates the potential value of abandoning the INF treaty.<sup>3</sup>

It is important to note that the deterrence concerns of Russia and China are not limited to the United States. Each sits in a complex security environment and faces neighboring countries with mixed nuclear and geopolitical ambitions. Their own strategic relationship has a strong element of deterrence in it, because leaders in both countries recall the twists and turns of their bilateral relations in decades—and centuries—past. But it is less central to their relationship now than during the Cold War, when competition and counter-balancing were clearly in evidence.

It is important also to note that deterrence is not the sole concern of either Moscow or Beijing—it is a primary concern on a long list of concerns. Each seeks the benefits of cooperation with the West and the United States even as it hedges against the possibilities for which deterrence is relevant.

From a U.S. perspective, deterrence no longer plays the fundamental role in major power relations that it did during the Cold War. But this does not mean it has totally disappeared. Rather, it is one of three primary concerns.

One of those concerns is dissuasion. The 2001 *Quadrennial Defense Review* reintroduced this term to the American strategic jargon, with the argument that deterrence is relevant for enemies with intentions

<sup>&</sup>lt;sup>3</sup> For further insights into contemporary Chinese concerns, see Shen Dingli, "Nuclear Deterrence in the 21<sup>st</sup> Century," *China Security* 1 (Autumn 2005), pp. 10-14; Sun Xiangli, "China's Nuclear Strategy," *China Security* 1 (Autumn 2005), pp. 23-27; and Yao Yunzhu, "Chinese Nuclear Policy and the Future of Minimum Deterrence," *Strategic Insights* (Naval Postgraduate School, Center for Contemporary Conflict), Vol. 4, No. 9 (September 2005).

to harm U.S. interests whereas dissuasion is relevant for potential adversaries whose hostile intentions have not yet taken shape and might yet be effectively "shaped." The need to introduce this concept arose from the perception that, from the American vantage point, major power relations are changing in some fundamental ways—for the better. In this view, the major powers (as defined here—Russia, China, and the United States) are no longer enemies; but nor are they trusting partners in the way that the major powers in the transatlantic community are. Hence the emphasis on limiting the potential for adversarial relations as opposed to the reality of conflictual ones.

The presidential transitions in both the United States and Russia, the many disappointments in the bilateral relationship over the last decade, and the turn to authoritarianism in Russian domestic policy and nationalism in its foreign policy, all suggest that this perception of positive change no longer exists. It may yet prove true that these developments will lead to a fundamental re-thinking of U.S. strategies toward Russia. But so far at least these developments suggest a sobering from unrealistic expectations of a decade ago and a realization that the trend toward deeper strategic cooperation will play out more slowly than expected. U.S. political leaders continue to speak hopefully about the strategic relationship in 2008 even as they debate whether and how to contend with negative developments and shape future Russian choices.

In U.S. policy, this generally positive perspective on major power relations puts the emphasis on opportunities and hedging rather than on conflicts and confrontation. The 2002 *National Security Strategy* makes this point clearly, emphasizing the possibility and desirability of moving major power relations onto a new footing of common interests and common responsibilities and deepening strategic cooperation on an expanding set of mutual interests. American leaders across the political spectrum are committed to engaging both China and Russia as "responsible stakeholders" in international order. They want to do what they can to ensure that decision-makers in Beijing and Moscow do not form new intentions to compete with the United States or challenge its interests in new and more

robust ways. To be sure, such competition already exists in the political, economic, and military domains, but so far at least the military competition has been limited and not fundamentally harmful to the political and economic relationships. In the strategic military realm, the United States seeks to dissuade Russia from a renewal of competition for nuclear advantage and to dissuade China from a "sprint to parity" (defined as a rapid build-up of deployed nuclear forces to achieve equivalence as Russian and American deployed nuclear forces shrink). Toward this end, it has set out to tailor its strategic infrastructure so as to be able to out-compete Russia and China in the competition they might choose.

As part of this dissuasion strategy, the United States also provides assurances to both Russia and China that the evolving New Triad of strategic forces is not "pointed at them." In making its case in 2001 for withdrawal from the Anti-Ballistic Missile (ABM) Treaty, the administration elaborated a "New Strategic Framework" aimed at stability in U.S.-Russian relations as it sought to address the instability in relations between the United States and rogue states seeking nuclear-tipped ballistic missiles. In a political strategy aimed at persuading Moscow, Beijing, and others in the international community of the stabilizing virtues of this new framework, the Bush White House issued a detailed summary of key points that it had been making to U.S. allies, friends, and others about the post-ABM Treaty world. It sent a clear and direct message to Russia, in terms of its willingness to codify deeper restraint in the Strategic Offensive Reductions Treaty, also known as the Moscow Treaty of May 2002. It also sent a clear and direct message to China: "We do not view China as an enemy and our limited missile defenses are not directed at it." 5 Six years later, this theme was echoed by Secretary of Defense Gates:

It is worth reaffirming that the missile defense[s] that we are planning both at home and abroad, both in Europe and in Asia, are intended to deal with the acquisition of ballistic missiles and weapons of mass

<sup>&</sup>lt;sup>4</sup> Testimony by Donald H. Rumsfeld, then U.S. secretary of defense, before the Senate Armed Services Committee, 25 July 2002.

<sup>&</sup>lt;sup>5</sup> From White House papers on ballistic missile defense as briefed to the media July 11, 2001.

destruction by either rogue states or rogue governments or terrorist groups. The capabilities that we are talking about are not designed to deal with the large-scale threat such as would be posed by either the Russians or the Chinese. So in neither case is ballistic missile defense aimed at weakening the deterrent of either China or Russia... Anything we can do to provide transparency on that point and help people understand the capabilities and characteristics of these systems, we are prepared to do.<sup>6</sup>

The assurances are central to dissuasion. If either Moscow or Beijing concludes that its vital interests will be jeopardized because of the restraint they have shown Washington in the strategic military realm, then dissuasion will have failed.

It is not clear whether or how the language and logic of dissuasion might be adapted in a new U.S. administration. But it seems highly unlikely that the next U.S. president will want to give up on the notion of avoiding deeper strategic competition with Russia, China, or both.

A second top-level U.S. concern is to create the "right currency" in the major power relationships. The wrong currency, argues the Bush administration, is the nuclear balance of power (there is little dissent from this proposition in the United States). An excessive focus on the nuclear balance of power is now understood to obstruct the effort to engage Russia and China in the needed dialogue about the obligations of responsible stakeholders. Accordingly, the Bush administration has pursued efforts to move nuclear weapons "out of the foreground and into the background" of U.S.-Russian relations. It has also begun a dialogue on nuclear policy and strategy with China, with the ambition of building confidence in the political relationship. These efforts have proceeded fitfully and face

<sup>&</sup>lt;sup>6</sup> From remarks in a press conference with Secretary Robert M. Gates, chairman of the Joint Chiefs of Staff General Peter Pace, and Commander of the Pacific Command Admiral Timothy Keating, Shangri-La International Security Conference, Singapore, June 3, 2007. The comment was in response to a question about whether the United States would consider an offer to China similar to the one reportedly made to Russia for cooperation on missile defense.

many challenges. Again, it is too early to predict how a future U.S. president might pursue this agenda; but it also seems highly unlikely that efforts will be made to reemphasize a central role for nuclear competition in these strategic relationships.

The difficulty of keeping strategic military competition out of the foreground of the political relationships among these three powers seems likely to intensify in the years ahead. As Russia and China modernize their nuclear forces and as the United States "transforms" its strategic posture (as envisioned in the New Triad), there is a significant possibility of an intensification of competition. The loose triangular relations among the three could give way to a much more competitive tripolarity.<sup>7</sup> An out-right arms race for qualitative and quantitative advantage seems unlikely. But the fielding of new capabilities will seem to demand responses from the others and generate new tensions in the political relationships.

Accommodating increased dynamism in the balances of strategic military power while also avoiding an intensification of competition and a souring of political relations requires broader and deeper strategic dialogue among the three than has so far been possible. It may also require new arms control mechanisms and/or new informal forms of restraint. It is possible to imagine that the U.S. desire to assure Russia and China will result in new promises of restraint vis-à-vis the deployment of offensive and defensive strategic systems. Indeed, some prominent former government officials are arguing for an acceleration of nuclear reductions and a withdrawal of U.S. nuclear forces toward the end of eventual nuclear disarmament.<sup>8</sup> It is possible also to imagine an opposite result: that policy-makers will conclude that they need to face the new dynamism with a maximum of flexibility and that their national interests are better served by a release from restraint than by deeper restraint. Advocates of this way of thinking can be found in all three capitals.

<sup>&</sup>lt;sup>7</sup> For more on this topic, see Brad Roberts, *Tripolar Stability: The Future of Nuclear Relations Among the United States, Russia, and China, P-3727* (Alexandria, Va.: Institute for Defense Analyses, 2002). <sup>8</sup> George Shultz, William Perry, Henry Kissinger, and Sam Nunn, "Toward a Nuclear-Free World," *Wall Street Journal*, January 15, 2008.

The third concern then is deterrence. In U.S.-PRC relations, the primary deterrence concern is of course Taiwan—and the potential that the PRC would feel it necessary to use force if one of its red lines is crossed. People's Liberation Army planners have clearly articulated a theory of victory in such a conflict and PLA leaders are making steady improvements in the needed capabilities. Persuading Beijing not to act militarily across the strait requires tailored U.S. (and allied) military capabilities and strategic messages. Deterrence is reinforced by the rise of shared economic and other interests that would be put at risk by war. Taiwan may be the primary deterrence concern in U.S.-PRC relations, but it is not the only one. The U.S. is also concerned with inhibiting China's use of military power to press its various territorial and sea-bed claims along its maritime periphery, especially over the longer term as its more modern military force is fielded.

In U.S.-Russian relations, there is no similar obvious flashpoint. Indeed, U.S. military planners worry little about how to deter aggression or escalation by Russia, except in that extremely unlikely circumstance in which Russia might consider nuclear attack on the United States.

In sum, like Russia and China, the United States sees a continuing role for deterrence in major power relations. But it puts its concerns about deterrence in a larger strategic framework informed by new ways of thinking about how to achieve stable and peaceful relations with Russia and China.

With the United States re-immersed in its presidential electoral cycle at this writing, it is appropriate to speculate a bit about whether or how the perspectives and concepts summarized above are likely to survive in a new presidential administration. It is important to recognize that every new presidential administration appropriately feels the need to put its own imprint on America's strategic vocabulary. But it is equally important to recognize that the changes in vocabulary can be misleading because, by

<sup>&</sup>lt;sup>9</sup> For further detail, see China's biennial Defense White Paper as well as the annual reports on China's Military Power issued by the U.S. Department of Defense.

and large, there has been substantial continuity in U.S. strategic policy in the two decades since the Cold War began to wind down.

Terms like "New Triad" and "right currency" seem unlikely to be re-embraced by the next administration, as they are generally perceived as unhelpfully adding complexity to the discussion. But the notion embodied in the term "New Triad"—that the U.S. strategic military toolkit includes more than nuclear strike systems but also missile defenses and non-nuclear strike capabilities—is not likely to change. Similarly, though "right currency" might disappear as a term of art, the aspiration to shift major power nuclear relations away from a focus on adversarial peer military competition and onto the pursuit of common interests and common responsibilities seems also unlikely to change.

Terms like "assurance" and "deterrence" are highly likely to remain central to the U.S. strategic vocabulary whatever president and party occupies the White House. The focus on assurance is as old as the NATO alliance itself—if not older.

The term "dissuasion" has a more uncertain future. This term has appeared episodically in the U.S. strategic vocabulary, including in the early and mid-1990s. To the extent it reflects a positive aspiration to induce potential adversaries to deepen their partnership with the West, it is likely to remain salient. But for many in the American debate it is nearly indistinguishable from deterrence and indeed prompts a debate about whether there are any actual instances of successful dissuasion.

This short speculation about the vocabulary of America's next strategic policy debate would not be complete without some additional speculation about the focus of that debate. Of course, with the next U.S. nuclear posture review a year or two away, it is impossible to conjecture about the specifics of policy formulation in a new administration. But three key themes are likely to cut a large swath across the debate. First, which paradigm should guide U.S. defense policy—the major power paradigm (and the potential for future renewal of peer adversarial relations)

or the long war paradigm (with its focus on regional security challenges and the "global war on terror")? Second, to what extent does restraint in major power strategic military relations require further and deeper restraint by the United States—or should it seek even more flexibility for itself and accept freedom of maneuver by the other major powers as the price of that flexibility? Third, what should it do about China's rise and its ambitious program of military modernization? Obviously, answers to these questions are inter-linked. And they will cut across the landscape of issues discussed in this paper.

Is there a NATO perspective on the role of deterrence in major power relations? Obviously there is no single perspective. Some members are highly motivated by the nuclear guarantee and extended nuclear deterrence. Others seem more highly motivated by the possibilities to accelerate nuclear de-emphasis and the political transformation of Europe. For many, the Russian nuclear challenge seems to attract little interest beyond the views expressed in paragraph 21 of the 1999 Strategic Concept ("a significant factor... to take into account"). For most, China seems an idle curiosity. This apparent lack of focus on the relationships of strategic military power among the United States, China, and Russia seems unhelpful. It is certainly inconsistent with the emerging dynamism in those relationships and with the potential that new forms of competition will create unwelcome political tensions. And it seems to take too lightly the problems for the alliance that would come with any military crisis with Russia or China under the nuclear shadow.

How should these issues matter to NATO? A simple device for framing an answer is to draw on the Alliance's 1999 Strategic Concept.

On purposes and tasks: the language on deterrence and defense needs to be amplified with the language of dissuasion and assurance. To achieve the desired security and stability of the Euro-Atlantic area, the Alliance should aspire to do more to shape major power strategic relations in positive ways. This must obviously include agreement across the Atlantic about how common purposes can be achieved by common action within the context of a division of labor. Less obviously it requires something more than mere follower-ship by America's European allies, who are well positioned to offer America the frank advice that can help it to steer a predictable and effective course in the international security environment.

On the evolving strategic environment: we find ourselves in a period marked by both hope and uncertainty in relations among the major powers and we should clearly express both the opportunities to lead in a way that accelerates the positive transformation of major power relations while also hedging against the possibility that they might erode in unwelcome ways.

On security challenges and risks: the risk is in a potential renewal of major power nuclear competition for advantage and the challenge is to manage major power relations in a way that ensures continued nuclear risk reduction.

On partnership, cooperation, and dialogue: be more specific about the character of dialogue sufficient to assure and dissuade.

On arms control: promise the maximum possible restraint and also a commitment to adapt and innovate to ensure that cooperative measures continue to provide security benefits as strategic force postures evolve.

On the character of nuclear forces: the emphasis on the functions of deterrence should be supplemented with elaborations on the functions of dissuasion and assurance.

## WAGING DETERRENCE AGAINST IRAN

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The Iranian nuclear challenge to world order has grown gradually over the past two decades, largely in the shadows until the mullahs' atomic secrets were laid bare in 2002 by the media and subsequent International Atomic Energy Agency (IAEA) inspections, but that challenge now appears to be building to a crescendo. Despite the passage of three rounds of economic sanctions by the UN Security Council (UNSC) and a host of other measures pursued individually and collectively by the United States and its allies, Iran remains committed to its policy of defiance and brinkmanship, convinced that the major powers lack the will and even the capability to stop its march towards the bomb. Although momentarily deflated by the US National Intelligence Estimate (NIE) of November 2007, momentum seems to be building once again for a US military confrontation with Iran. In part, this pressure for pre-emptive action is driven by deep skepticism on the part of some that a nuclear-armed Iran would behave responsibly and could be deterred from using nuclear weapons. All of this serves to underscore the vital importance of building a contemporary framework for waging deterrence, particularly in an alliance context, and then assessing the prospects for deterrence success or failure as it relates to the Islamic Republic of Iran.

# The Iranian Nuclear Challenge

Learning from previous proliferators, Tehran has cynically exploited its status as a party to the Nuclear Non-Proliferation Treaty (NPT) as a cover under which to advance its nuclear weapons goals. Thus,

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Iran secretly developed a large-scale uranium enrichment program, as well as a heavy water facility to supply the research reactor it is building. Upon completion, this 40 megawatt reactor will be ideal for producing plutonium. In short, Iran is simultaneously developing both fissile material routes to the bomb, a feat not undertaken since the US Manhattan Project during World War II. Iran has steadfastly denied that these capabilities are intended for nuclear weapons, despite a considerable body of circumstantial evidence to the contrary in the hands of the IAEA, the UN organization responsible for detecting noncompliance with the NPT. Rather, Tehran has pandered both to the Iranian populace and the developing world, to assert that it was defending Iran's and every nation's inalienable right to develop peaceful applications of nuclear technology.

While Iran is not a party to the Missile Technology Control Regime, it has followed a similar strategy on the missile front. After years of overt military development of ballistic missiles, Tehran has of late sought to obscure its development of longer-range missiles under the guise of a civilian space launch program. In short, Iran has been pursuing a strategy of steady accretion of nuclear and long-range missile capability that will enable it to break out of the NPT on short notice and deploy nuclear-armed inter-continental range ballistic missiles.

Under its extremist president, Mahmoud Ahmadinejad, the Iranian regime has become increasingly brazen in its atomic ambitions, effectively hiding its nuclear weapons pursuit in plain sight. In April 2006, Ahmadinejad was bragging to the Iranian people that Iran was already moving beyond its first-generation centrifuges, the devices that enrich uranium to reactor or nuclear weapons grade, at the same time that Tehran was refusing to disclose this information to the IAEA.¹ At the second annual "National Nuclear Technology Day" in April 2008, President Ahmadinejad conducted a publicized tour of the massive Natanz uranium enrichment facility, accompanied by his Defense Minister, Mostafa

<sup>&</sup>lt;sup>1</sup> William J. Broad and David E. Sanger, "New Worry Rises After Iran Claims Nuclear Steps," *International Herald Tribune*, April 17, 2006, <a href="http://www.iht.com/articles/2006/04/17/africa/web..php">http://www.iht.com/articles/2006/04/17/africa/web..php</a>

Mohammad Najjar.<sup>2</sup> Najjar is a Brigadier General in the Islamic Revolutionary Guards Corps (IRGC), the regime's radical military wing. Later in the celebrations, President Ahmadinejad was seen on Iranian national TV seated between his Minister of Atomic Energy, Gholamreza Aghazadeh, and the Chief of the Iranian General Staff, Major General Hasan Firuzabadi. Firuzabadi is the top military officer in the regime, representing not just the IRGC but also the regular Iranian armed forces. Acutely aware of the importance of visual imagery and symbolism, Ahmadinejad was conveying to both domestic and international audiences the military potential, indeed desired end state, of Iran's achievements in "peaceful nuclear technology." Sadly, the international community expressed no outrage over the Iranian military's participation in these nuclear celebrations, likely reinforcing the regime's perception that the West lacks the will to confront its nuclear challenge.

Iran has shrewdly pursued its nuclear strategy in a way that makes it highly resistant to diplomatic interference and military preemption. It has cultivated ties with Russia and China such that both nations have actively resisted efforts in the UNSC to bring more pressure to bear on Tehran to suspend its uranium enrichment and plutonium-related activities, as called for by the Council, as well as the IAEA Board of Governors. Moscow sees Iran as an important market for Russian nuclear power reactor and conventional arms sales. Beijing views the Islamic Republic as an increasingly important source of energy needed to sustain the growth of China's economy. Both capitals are eager to keep US influence in the Middle East in check, particularly after the Bush Administration broke ranks with the UN Security Council to invade Iraq in 2003.

Tehran also learned from the mistakes of Iraq and dispersed its nuclear facilities across the broad expanse of its territory. Key facilities at Natanz and elsewhere are hidden underground or are burrowed into mountains. The result is that, unlike Iraq's nuclear reactor in 1981 and Syria's

<sup>&</sup>lt;sup>2</sup> "Visit to Natanz Nuclear Site," Photo Archive, Official Presidential Website, April 8, 2008. See also, "Attend in Special Ceremony National Nuclear Day," [sic] April 9, 2008, <a href="http://www.president.ir/en/">http://www.president.ir/en/</a>

secret reactor in 2007, both of which were destroyed by the Israeli Air Force, there is no single choke point in the Iranian nuclear program that could be destroyed in a similar "surgical strike." Iran has further bolstered its position by warning of the harsh retaliation that would follow any attack on its nuclear facilities. Iran has explicitly declared that it will attack Israel and US bases in the region using ballistic missiles if it is struck, and has likewise warned that US troops in Iraq and Afghanistan will be targeted. Indeed, Iran's ongoing support for Shia insurgent groups in Iraq and for its former foe, the Sunni Taliban in Afghanistan, should be seen in part as Tehran's effort to further enhance the credibility of its deterrent threats.

What has become lost in the debate over Iran's intentions and technical accomplishments and the response options available to the West is the realization that Iran has already become a virtual nuclear weapons state. That is, it is now only a matter of political will that keeps Iran from actually fabricating a nuclear weapon, not the lack of physical capability. As successive IAEA safeguards reports make clear, Iran has produced enough uranium hexafluoride (UF6), an intermediate form of uranium, to produce tens of nuclear weapons. Iran has likewise been caught by the IAEA with a document obtained from the A. Q. Khan proliferation network explaining how to machine uranium into a sphere, the unmistakable fissile core of a nuclear weapon. Other incriminating evidence indicates that Tehran has engaged in the type of high explosive testing necessary to compress such a uranium sphere to trigger a nuclear explosion and has been modifying the design of its Shahab missile to accept a nuclear payload.<sup>3</sup>

The ruling mullahs of Iran seem to understand fully the significance of this virtual nuclear status. In February 2007, they moved 9 tons of UF6 from the uranium conversion facility in Esfahan to the underground enrichment hall at Natanz. The tonnage is significant because it is publicly estimated to be sufficient for the production of at least one

<sup>&</sup>lt;sup>3</sup> David E. Sanger, "Agency Confronts Iran With Evidence On Nuclear Weapons," *New York Times*, February 22, 2008, http://www.nytimes.com/2008/02/22/world/middleeast/22cnd-Nuke.html

nuclear weapon.<sup>4</sup> Thus positioned, Iran could transition from virtual to actual nuclear weapon state in fairly short order by adapting its current centrifuge configuration at Natanz to produce weapons-grade uranium, using the UF6 already on hand. Presumably, Iran would suspend its adherence to the NPT or withdraw outright to make such a move, but the potential window for the world to react could be quite narrow, as little as one to two months.<sup>5</sup>

The international community is extremely reticent to acknowledge Iran's virtual nuclear weapons status. This self-denial is only natural, for to accept Iran as a virtual nuclear weapons state is to risk unraveling the painstaking efforts over the past six years to impose even fairly tame UNSC sanctions on the Islamic Republic. But rather than induce despair, taking stock of Iran's nuclear progress, the regime's tendency to exaggerate notwithstanding, should more importantly serve to reinvigorate international efforts to deter Iran from actually building the bomb or, failing that, begin to develop plans to deter its use.

### The Risk to Europe

In some quarters, there may be a tendency to view the Iranian nuclear challenge as essentially an American or Israeli problem. In reality, Europe will not remain out of the Islamic Republic's cross-hairs for very long, as Tehran increasingly flexes its nuclear muscles, virtual or otherwise. The potential for Iranian-European crises and even conflict spans a range of military, diplomatic, and even cultural flashpoints.

In military terms, European nations acting individually or within the NATO context are already tangling with the Iranian military and its armed proxies. Turkey and Iran engaged in a border clash in 1999 and sus-

<sup>&</sup>lt;sup>4</sup> "Iran Readies Gas for Enriching Uranium: Diplomats," *Agence France Presse*, February 19, 2007, http://www.spacewar.com/2006/070219182008.tl42vuhs.html

<sup>&</sup>lt;sup>5</sup> Assuming Iran accumulated a stock of low-enriched uranium first and then moved to enrich it to weapons-grade at Natanz using the 3,000 P-1 centrifuges currently in operation. See David Albright, "When Could Iran Get The Bomb?," *Bulletin of the Atomic Scientists*, July/August 2006, 32-33, <a href="http://thebulletin.metapress.com/content/d427773518542nn1/fulltext.pdf">http://thebulletin.metapress.com/content/d427773518542nn1/fulltext.pdf</a>

picions remain between the two over the Kurdish issue. British naval patrols in the Persian Gulf have been seized by the IRGC twice since 2006. UNSC Resolution 1803 could provide another potential flashpoint, as it authorizes member states to stop certain Iranian cargo carriers on suspicion of transporting WMD-related materials. Coalition forces on the ground in Iraq and NATO forces in Afghanistan are increasingly feeling the pressure of insurgents armed, trained, and directed by Tehran. France's security agreements with some of the Gulf Arab states, and its recently announced plans to establish a naval base in Abu Dhabi, likewise increase the risk of a regional military clash with Iran.

At the same time, Tehran is building up its capability to project power beyond the Persian Gulf/Central Asian region, primarily in the form of its aforementioned ballistic missiles. Following in the footsteps of nations such as China and North Korea, Iran is using a stepping-stone approach to develop an ICBM capable of reaching the United States. In truth, European cities will fall within Iranian missile range first, extending from Turkey currently, to Italy, France, Germany, and Great Britain before long.

With this enhanced power projection capability, the potential for Iranian-European disputes will grow further still, as will the potential for escalation. Already, the Islamic Republic has a peculiar notion of sovereignty, which amounts to "what's mine is mine and what's yours is mine." As the 1979-1981 US embassy hostage crisis made clear, Iran's ruling mullahs do not respect the extra-territoriality of foreign embassies and consulates. Those NATO nations with diplomatic presence in Iran are not immune to this risk, as demonstrated by the shots fired at the British embassy in Tehran in 2003. At the same time, Iran does not recognize the sovereignty of other nations even within their homelands, insofar as Islamic matters are concerned. Thus, Ayatollah Khomeini infamously issued a fatwa, or religious edict, calling for the death of British author Salman Rushdie for his perceived insults to Islam, a death warrant that remains in force today. It is not difficult to imagine, for example, future Dutch or Danish artists exercising their freedom of expression in ways that

offend Iranian sensibilities only to touch off a major international crisis, as Iranian extremists brandish newfound nuclear and long-range missile capabilities.

As Hassan Rohani, then Iran's lead nuclear negotiator, remarked in 2005, "Overall, it is clear that Europe is not our friend and that it does not have a good relationship with Islam...We do not have any trust in them." What makes these remarks particularly noteworthy is that they were made by an Iranian political figure considered to be a *moderate*. In short, Europe will not find an easy accommodation with a nuclear-armed Iran, regardless of US or Israeli policy.

# Waging Deterrence in an Alliance Context

In order to meet the growing nuclear threat from Iran, it is increasingly necessary to develop a more contemporary approach to deterrence, one that is rooted in a structured framework with three main components: a conceptual basis, an organizational focal point, and a defined process.

The Deterrence Operations Joint Operating Concept (DO-JOC)<sup>7</sup> developed and adopted by the US military provides a useful conceptual basis for tailoring deterrence to new and emerging threats. In essence, the DO-JOC is predicated on three assumptions:

- In deciding whether to undertake an aggressive act, an adversary will
  weigh the costs and benefits of that aggression, as well as the consequences of not undertaking it.
- It is possible to approximate the calculus by which the adversary will make this decision.

<sup>&</sup>lt;sup>6</sup> Text of speech by Supreme National Security Council Secretary Hassan Rohani to the Supreme Cultural Revolution Council; place and date not given: "Beyond the Challenges Facing Iran and the IAEA Concerning the Nuclear Dossier," Rahbord (in Persian), 30 September 2005, pp 738. FBISI-AP20060113336001.

<sup>&</sup>lt;sup>7</sup> Available at: www.dtic.mil/futurejointwarfare/concepts/do\_joc\_v20.doc

• It is possible to influence that decision calculus by drawing upon the full range of national power.

The DO-JOC contends that the requirements of deterrence will vary according to the character and goals of the adversary regime in question, the specific parameters of the scenario, and how the regime's perceptions of costs, benefits, and consequences of inaction shift over time and in response to US deterrent actions. Years in the making, the DO-JOC is a well-honed concept that is not only guiding current US joint deterrence planning but provides a logical basis on which to build a new deterrence dialogue within NATO.

Proceeding from this concept, contemporary deterrence planning requires an organizational focal point to translate deterrence concepts into actionable plans. In the US context, this focal point currently is found within Strategic Command (USSTRATCOM), the successor to the Cold-War era Strategic Air Command. In some sense, it is logical to expect military organizations with responsibility for nuclear weapons initially to give rise to such focal points, as they tend to be the repositories of deterrence planning. However, as the DO-JOC fully acknowledges, to be effective, deterrence must draw upon the full range of diplomatic, informational, military (including non-nuclear), and economic levers at the nation's disposal. At a minimum, this requirement underscores the need for interagency coordination, not to mention a perch from which deterrence could be waged as a nation. Moreover, just as the requirements of deterrence are likely to exceed the grasp of any single component of national power, it follows that deterrence will likely need to be waged in concert by multiple nations acting jointly as a coalition or as a longer-standing alliance. This realization serves to reinforce the need for a new common approach to deterrence planning within NATO, drawing upon the spadework done to date by USSTRATCOM.

The process guiding the work of the deterrence planning staff should logically commence with a detailed profile of the adversary or adversaries in question. This profile should identify the key powerbrokers in the regime, i.e., those individuals who will make or influence the decision to initiate hostilities and/or the use of weapons of mass destruction (WMD). The profile should include not just the individual and collective goals of these key figures, but how they access information and reach decisions. The adversary profile should likewise characterize the value structure of the leadership elite. That value structure should go beyond physical assets that tend to be the focus of traditional military planning to consider principles, conditions, and personal attributes that the leadership holds dear.

In the Iranian context, such a profile must acknowledge both formal and informal power centers and the highly personalized nature of decision making. In effect, national security decision making in Iran is limited to three main factions, each headed by a principal figure: "traditional conservatives" associated with the current Supreme Leader, Ayatollah Khamene'i; "pragmatic conservatives" identified with Ayatollah Hashemi Rafsanjani; and "ultra-conservatives" or "principlists" usually supportive of President Ahmadinejad.<sup>8</sup> Relations among these three camps vary. There is competition for influence between the pragmatists and traditional conservatives punctuated by episodes of cooperation. Relations between the traditional and ultra-conservative camps tend to be cooperative, but on occasion, the Supreme Leader has also needed to restrain President Ahmadinejad. Relations between the pragmatists and ultra-conservatives are marked by intense conflict. As this overview suggests, the Supreme Leader plays a key role in brokering disagreements amongst the factions.

From a detailed profile of the adversary, it is then possible to develop a scenario-specific deterrence calculus. That is, within a given context, what costs and benefits would the adversary's key figures likely associate with initiating or eschewing aggression and how would they probably weigh, in a qualitative fashion, those factors? The intent of this deterrence calculus is not to predict adversary behavior, but rather to

<sup>&</sup>lt;sup>8</sup> Particularly since 2005, the reformists within Iran have been considered politically suspect by traditional and ultra-conservatives and therefore have been essentially cut out of security-related deliberations.

approximate the factors that will be most important to adversary decision making. Once those factors have been identified, it is then possible to devise deterrent measures that aim to shift the adversary's calculation away from undertaking some aggressive or WMD pursuit, usually through a combination of actions designed to increase the adversary's costs, reduce its benefits, and convince it that the failure to undertake such aggression would not make it worse off. This combination of deterrence actions could then be collated into an overall deterrence plan that could be implemented, monitored, and adjusted as necessary.

To be sure, such a deterrence undertaking is not for the faint-hearted. It requires one to embrace complexity in many forms, such as managing uncertainty in the assessments, the potential for deterrent actions to generate unintended and undesirable consequences, and the difficult challenges of measuring deterrence effectiveness. That is, how can we be sure that the adversary has not launched an aggression because of our deterrent actions? Advances in social science in general and decision science in particular can potentially help manage this complexity to some degree. Exploratory efforts to apply these advances specifically to deterrence are underway in the United States and elsewhere. This raises the potential for transatlantic cooperation amongst scholars and institutions as a form of "intellectual burden-sharing" on deterrence.

Similarly, such deterrence planning necessitates going outside the comfort zone of government bureaucracies to engage in politically sensitive activities and realms. In the context of Iran, this means efforts to influence internal political dynamics and to challenge the Islamic legitimacy that its extremists have already asserted over WMD acquisition and use.<sup>9</sup> These are two realms in which the West is not as smart or deft as it needs to be, yet it is here that the struggle to successfully deter the Islamic

<sup>&</sup>lt;sup>9</sup> In February 2006, Mohsen Gharavian, a clerical disciple of ultra-conservative Ayatollah Mesbah Yazdi, asserted that "When the entire world is armed with nuclear weapons, it is permissible to use these weapons as a counter-measure. According to Sharia too, only the goal is important." See Colin Freeman and Philip Sherwell, "Iranian Fatwa Approves Use of Nuclear Weapons," Telegraph, February 18, 2006, http://www.telegraph.co.uk/news/worldnews/middleeast/iran/1510900/Iranian-fatwaapproves-use-of-nuclear-weapons.html

Republic will be won or lost. It would seem even riskier to simply cede this virtual territory to the adversary.

# **Prospects for Deterring Iran**

As the DO-JOC makes clear, any assessment of the prospects for deterrence depends, in part, on the scenario in question. Yet, even in the absence of a detailed scenario, it possible to see warning signs that deterrence of Iran is not likely to be achieved easily or sustained reliably. Foremost, the credibility of Western threats is lacking in Iranian eyes. The West, and the United States in particular, has a track record of failing to hold Iran accountable for engaging in terrorism, giving the regime no reason to stop this behavior. Moreover, half a decade of negotiating and posturing show that Western "red lines" drawn to impede Iran's nuclear pursuits have no real meaning. By its own admission, the United States has essentially run out of sanctions that it can apply to Iran individually, and collectively the West is unprepared and unwilling to invoke the sanction most likely to give Tehran pause, an embargo of its oil exports and gasoline imports. The United States has also undercut its own deterrent posture by conceding that militarily it is over-stretched in Iraq and Afghanistan. The credibility of Western incentives, or rewards for exercising restraint, is similarly discounted in Tehran. Iranian conservatives, in particular, remain convinced that the United States will never accept the legitimacy of the Islamic Republic and that to lower its nuclear guard now is to set the stage for regime change.

Against this backdrop, a number of regime idiosyncrasies seem to invite deterrence failure. There appears to be a high risk of regime misperception of Western deterrence measures, given the proclivity for conspiracy theories and information filtering. A telling episode in this regard is President Ahmadinejad's response to the late-2006 announcement that the United States was sending a second aircraft carrier to the Persian Gulf as a warning to Iran:

...I say to you [the Iranian people] to let your minds be at ease. If two warships come, let them come...Why did you say nothing two

months ago, when 140 of their warships left? Actually, I think that the fact that they are coming means that there is no possibility that anything will happen. What is dangerous is if [the carriers] leave the region; then, it will be clear that they have a plan. That is exactly what I said at the Supreme National Security Council meeting some time ago. [I said] be certain that the departure of those American warships from the Persian Gulf is the beginning of a bad event. Then [indeed] we saw that they caused the Lebanon War. 10

Ahmadinejad's comments are particularly worrisome because they:

- Draw a direct causal relationship between two unrelated events, the routine rotation of US naval forces out of the Persian Gulf in the summer of 2006 and the war between Israel and Hezbollah. This potentially raises the danger that Iran will likewise assign future blame for unrelated events to the United States, increasing the risks of crisis escalation as the regime over-inflates or underestimates the threat it is facing.
- Effectively invalidate the West's deterrence measure of choice, a show of naval force.
- Underscore how regime extremists seek to downplay the risks that Iran is running by refusing to suspend uranium enrichment. This deliberate effort to minimize the dangers of current Iranian policy is further exacerbated by government-imposed "gag orders" on the Iranian media, greatly curtailing domestic coverage of the nuclear crisis.
- Indicate that, contrary to critics who seek to minimize his influence, President Ahmadinejad is weighing in on highly sensitive national security deliberations at the highest levels of the regime.

<sup>10</sup> "Iran President Ahmadinejad: 'I Have a Connection With God, Since God Said That the Infidels Will Have No Way to Harm the Believers'; 'We Have [Only] One Step Remaining Before We Attain the Summit of Nuclear Technology'; The West 'Will Not Dare To Attack Us," Special Dispatch Series, Nο 1328. October 2006. Middle East Media Research Institute. http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP132806

Metaphysical dimensions of the current Iranian regime further raise the risk of deterrence break-down. Among religious zealots in the clerical as well as military ranks, there is a tendency to discount "earthly" costs in favor of "heavenly" gains. This tendency of extremists to disregard the potential negative consequences of their actions is difficult for Western audiences to comprehend, not least because it undercuts the assumption in the DO-JOC and deterrence theory more broadly that the adversary weighs benefits and costs before deciding his course of action. Additionally, warfare might serve the apocalyptic agenda of some within the regime. Specifically, the Hojjatieh sect, linked to President Ahmadinejad and other high-level regime figures, evidently ascribes to the belief that it can hasten the return of Sh'iism's messiah, the Hidden Imam, by provoking conflict. There are also indicators that Iran's Supreme Leader relies on mystical fortune telling techniques in his decision making.<sup>11</sup> These various mystical factors greatly complicate the task of Western deterrence planning.

To be sure, some Iranian strategists are familiar with the Western deterrence literature, including the works of Thomas Schelling, Patrick Morgan, and Lawrence Freedman. Yet there is reason to believe that this body of work is being distorted to make the case for why Iran should obtain nuclear weapons. Other centers of strategic thought in the Islamic Republic exist and have a much more ideological and unconventional approach to military strategy, setting the stage for multiple and competing schools of Iranian nuclear doctrine, hardly the harbinger for stable deterrence relationships. In short, while some Iranian factions appear to be deterrable, others do not, and mystical "wild cards" could trump even the best deterrence plan.

All of this suggests that for Iran to be deterred, the West should foremost appeal to those leadership audiences that can be deterred and rely on them to keep the undeterrable regime elements in check. This

<sup>&</sup>lt;sup>11</sup> Mehdi Khalaji, "Apocalyptic Politics: On the Rationality of Iranian Policy," *Policy Focus*, no. 79, January 2008. Washington Institute Near East Policy. http://www.washingtoninstitute.org/templateC04.php?CID=286

needs to be accomplished via deterrence messages that do not:

- Get "lost in translation," literally and figuratively because we have not used the right words and/or we are not communicating with the right people in the regime;
- Insult Iranian pride;
- Portray Iran's leaders as having compromised with an external force;
- Offend mainstream Shi'a beliefs; or
- Incite apocalyptic elements in the leadership.

At the same time, these deterrence messages must:

- Increase the "deterrables" perception of the unacceptable costs of aggression;
- Reduce their perception of the benefits of aggression; and
- Convince them that they will be no worse off for eschewing aggression.

Naturally, this is a tall order, but understanding the basic, adversary-specific "do's and don'ts" is the first step to fashioning a deterrence messaging strategy with any hope of success. The actual content of the messaging will, of necessity, vary by scenario.

Although it is beyond the scope of this paper to lay out in detailed fashion those measures the West should adopt to deter Iran from building a nuclear bomb, it is useful to bear in mind why the regime has refused to suspend its enrichment activities over the past three years, namely, its perception that we lack the will, if not the capability, to confront it. Thus, it is likely the case that the Supreme Leader and the regime pragmatists must be made to fear that should they persist in their defiance of the international community any longer they will bring about that which they are seeking most to avoid, military attack and destabilization of the regime. To induce this perception, the United States and its Western allies will need to demonstrate jointly and convincingly that, as the progenitors of the modern form of brinkmanship, they remain the masters of that game.

#### Conclusion

As NATO adapts to a new and emerging threat environment, including the rise of a nuclear Iran, it will find it increasingly necessary to update its approach to deterrence strategy, missions, and planning mechanisms. This process of updating or tailoring deterrence to the idiosyncrasies of the adversary is underway in the United States, spearheaded by the analytical and planning efforts of USSTRATCOM. A more concerted effort to promote a dialogue within NATO based on these efforts would generate important mutual benefits, as knowledge about the adversary is pooled, deterrence concepts are evaluated and refined, and planning processes are synchronized. Stated differently, it is hard to imagine that the credibility of NATO's deterrent would be enhanced when its members lack a common deterrence concept and lexicon reflective of the times, have a poor understanding of the adversary, and adhere to incompatible and even counter-productive plans. As Iran's seemingly relentless march to the atomic bomb makes clear, urgent concerted action on the part of NATO is needed if a more effective deterrent strategy is to be developed and applied to Tehran and if hedging measures are to be ready in the event that strategy fails.

# INFLUENCING TERRORISTS' ACQUISITION AND USE OF WEAPONS OF MASS DESTRUCTION EXPLORING A POSSIBLE STRATEGY

#### Lewis A. DUNN\*

The potential acquisition and use of weapons of mass destruction (WMD) by a terrorist group is one of the major security threats confronting the United States and its NATO allies in the early 21st century. At least for now, the most dangerous WMD threat is from the entities that comprise the al-Qaeda-Jihadist movement, from the core leadership of Osama bin Laden and Ayman al-Zawahiri to Jihadist groups or cells affiliated with or inspired by that core leadership and its vision of global jihad. This movement alone combines a proven past interest in acquiring WMD, arguments allegedly justifying the moral-religious legitimacy and justifiability of the use of such weapons, and writings that put forward a number of perceived strategic motivations for escalating to WMD violence. In turn, assistance by outside aiders and abettors not directly affiliated with the al-Qaeda-Jihadist movement could well be critical to its successful acquisition and use of WMD.

Efforts to prevent al-Qaeda and its Jihadist affiliates – or for that matter, any other terrorist group – from acquiring WMD are the first line of defense against this threat. Since the start of the precedent-setting

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<sup>1</sup> This paper is a revised and condensed version of the author's discussion of deterring terrorist acquisition and use in Lewis A. Dunn, "Influencing Terrorists' WMD Acquisition and Use Calculus" in Lewis A. Dunn (ed.), Next Generation Weapons of Mass Destruction and Weapons of Mass Effect Terrorism, a report prepared for the Advanced Systems and Concepts Office of the Defense Threat Reduction Agency, January, 2008. The author's thinking has been influenced by the other members of this project team as well as by parallel work on deterring WMD terrorism by Dr. Bradley Roberts.

Cooperative Threat Reduction program in the 1990s, many actions have been taken by the United States and other countries to enhance security and controls on nuclear weapons, nuclear weapons-related materials, and other WMD-related materials, know-how, components, and inputs. A robust set of actions continue to be taken to buttress prevention, typified by cooperation among more than 60 countries under the U.S.-Russian Global Initiative to Combat Nuclear Terrorism. By contrast, despite periodic talk of the need to think seriously about "deterring terrorist use of WMD," the lack of a strategy to influence terrorists' thinking about whether to seek to acquire or use WMD remains a major gap in U.S. and global actions to counter the terrorist WMD threat.

Against this backdrop, this paper first sets out a framework for thinking about influencing terrorists' WMD acquisition and use calculus. It then applies that framework in two different cases: the al-Qaeda core leadership and possible state, criminal, and individual aiders and abettors of WMD terrorism. The discussion concludes by briefly discussing the way ahead.

Before proceeding, however, three prefatory points are in order. First, an influencing strategy should be viewed as only one element of an overall U.S. and global strategy to counter the threat of terrorist escalation to the use of WMD - but a potentially important and as yet still underdeveloped element. Second, the strategy set out here assumes that there will be an element of rational calculation, a weighing of costs and benefits, in any terrorist decision to attempt to acquire or eventually use WMD. That element of rationality may be more or less, depending on the group and its individual members. It also will be influenced by the particular lenses through which a group or its leaders view the world. Nonetheless, past terrorist behavior, including that of the most dangerous threat, al-Qaeda, warrants making this assumption. Third, use of the term influencing encompasses the concept of deterrence – whether by the threat of punishment or by denying terrorists the benefits sought. But the concept of influencing is intended to point toward a broader set of actions that might be pursued than simply punishment or denial. Use of the term "influencing" instead of "deterrence" also is intended to highlight a more uncertain nexus between U.S. and others' actions and terrorists' WMD calculus.

# A Framework for Influencing Terrorists' WMD Acquisition and Use Calculus

The most important concepts of the framework set out here can be summarized by a series of propositions. These propositions are:

- Disaggregate the terrorist "whom" to be influenced;
- Disaggregate the aider and abettor "whom" to be influenced;
- Identify the specific leverage points that could be used in an attempt to influence each of the different groups and their component entities as well as specific aiders and abettors;
- Think broadly in terms of "who" does the influencing not simply governments; and
- Be prepared to use both soft and hard power, words and deeds.

Consider each of these concepts in turn.

<u>Disaggregate the Terrorists</u>. There are many different *terrorist groups and entities*. With regard only to the most dangerous threat of the al-Qaeda-Jihadist movement, that movement comprises: the al-Qaeda core leadership of Bin Laden and al-Zawahiri; directly affiliated organizations such as al-Qaeda in Mesopotamia and al-Qaeda in the Maghreb; inspired or more loosely-linked groups such as Jemaah Islamiyah in southeast Asia; inspired cells such as those that have carried out terrorist attacks in the United Kingdom; and individuals often linked together and with other al-Qaeda entities via the Internet. Potential future recruits to any of these entities also are an important category of people to influence.

More generally, it is useful to distinguish al-Qaeda and its Jihadist affiliates from the many non-al-Qaeda terrorist groups. Prominent among the latter are such Islamist groups as Hamas and Hezbollah and non-Islamist groups such as the Liberation Tigers of Tamil Eelam (LTTE) and the Revolutionary Armed Forces of Colombia (FARC). At least for now, these non-al-Qaeda terrorist groups do not appear interested in escalating to WMD violence, most likely reflecting a judgment that WMD use would

alienate their supporters, antagonize their opponents, and make it more difficult to achieve their goals. By contrast, the entities that make up the al-Qaeda-Jihadist movement have sought to acquire WMD. Prominent Jihadists also have argued that WMD use and mass killing would be consistent with the Koran and the teachings of the Prophet – howsoever falsely.

<u>Disaggregate the Aiders and Abettors</u>. Three major categories of potential aiders and abettors of terrorist acquisition or use of WMD stand out: states, criminal and other organizations, and individuals.

State involvement could be witting, involving senior-most leadership or lower level officials or technical experts. Or state involvement could be unwitting, occurring despite best-faith efforts by a state to prevent terrorist access to WMD-related materials or know-how. There also are in-between cases. As for criminal organizations, ties already exist between some of those organizations and terrorist groups. Illicit trafficking in the former Soviet Union is a good example. In pursuit of financial or other organizational gain, there is little reason to distinguish between smuggling drugs, cigarettes, other contraband, or the small quantities of nuclear materials so far detected and seized. Personal gain also would be the most likely motivation for individuals to provide assistance to a terrorist group seeking to acquire or use WMD. The model would be the former head of Pakistan's nuclear weapons program, A.Q. Khan, who sold nuclear know-how to Iran, North Korea, and Syria. But fear and blackmail also cannot be excluded as motivating forces. In turn, some individuals could well provide assistance unknowingly, whether due to the disregard of established procedures to control sensitive information, through unguarded conversations, or in other ways.

Many different types of support could be provided by aiders and abettors. Some examples include: financial backing; insider access to facilitate diversion or to defeat detection and interdiction actions; direct supply of needed inputs; provision of technical information; and logistics and transportation. The provision of so-called technical know-how and art may be the most important type of assistance – that is, the often-unwritten

knowledge needed to make a particular WMD-related production process work effectively or to carry out a given operational step in a WMD attack. The critical importance of technical art is best exemplified by the unsuccessful 1993 attempt by the Japanese cult group, Aum Shinrikyo, to kill hundreds of thousands of people by releasing anthrax in downtown Tokyo. The group mistakenly released a non-lethal vaccine strain of anthrax, thereby having no impact. More generally, lack of access to technical art has been a repeated source of terrorist WMD attack failure.

Identify Potential Leverage Points. At least in principle, there is a spectrum of potential leverage points that might be used to influence the calculations of different terrorist groups as well as their aiders and abettors. Is the use of WMD – and quite possibly the killing of innocent civilians - justifiable and legitimate in the terms of the religious or moral teachings adhered to by the group and equally so by its wider public audience of potential supporters? What is the prospect of technical success whether in acquiring WMD or in carrying out a successful attack – the feasibility? Are there better ways to use the group's technical, organizational, financial, operational, and other resources than seeking to acquire and then use WMD? More broadly, how smart would be the use of WMD as a means to achieve the goals that animate the group and its members? Finally, how much risk would be involved in attempting to acquire and use these weapons - or in aiding and abetting such acquisition and use? Depending on the particular group or on the specific aiders and abettors, the answers to these questions will vary.

Think Broadly Regarding "Who" Does the Influencing. Many different players will need to be involved in implementing an influencing strategy. At one level, the United States should seek the support of likeminded governments among traditional U.S. friends and allies. In addition, support could be sought from moderate governments throughout the Muslim world. Despite differences with the United States on certain issues, these Muslim governments share an interest in preventing the ascendance of the al-Qaeda-Jihadist movement. Moreover, neither traditional U.S. friends and allies nor other governments should assume that the

victim of a terrorist WMD attack would necessarily be the United States. They, too, could be struck – whether due to an accident, loss of control, or deliberate intention.

Somewhat differently, international, non-governmental, and community organizations also can contribute, from a traditional entity such as the United Nations to professional, scientific, industry, and academic organizations. Other players would be Islamic as well as non-Islamic religious councils and associations, non-violent wings of domestic political-separatist movements across different countries, and prominent groupings of individuals with religious, social action, or other affiliations. Certain types of individuals alone, e.g., a highly-respected clerical authority, also could be sources of influence. Moderate Muslims in NATO nations and elsewhere also may be able to exert some impact on the thinking of the wider Muslim community around the globe that is the ultimate audience as well as the source of recruits for the Jihadist movement inspired by al-Qaeda.

Use Soft and Hard Power, Words and Deeds. Influencing terrorists' WMD acquisition and use calculus – and that of aiders and abettors – will partly entail use of soft power. In particular, efforts are essential to foster a wider public debate to influence perceptions of the legitimacy and justifiability of WMD use. In that regard, the lack of widespread outrage across the Islamic world at al-Qaeda's use of chlorine-explosive bombs in Iraq during 2006-2007 may have been a lost opportunity. Perhaps more controversially, the declaratory policies of the nuclear weapons states can shape more diffuse perceptions of the legitimacy of nuclear use. By way of example, consider a joint affirmation by the P-5 nuclear powers – the United States, Russia, France, the United Kingdom, and China – that, given that any use of a nuclear weapon would be a calamity, they will act individually and together to ensure that nuclear weapons are never used again. Closely related, decisive engagement by the P-5 in pursuing the goal of nuclear abolition also could de-legitimize nuclear use, though it would require them to make the case for their continued possession of nuclear weapons as a regrettable but necessary interim status pending the conditions for ultimate abolition. Declaratory policy is a means as well to influence perceptions of the risks of becoming involved in WMD terrorism.

For its part, the threatened use of hard power may be particularly important to influence perceptions of risk – whether on the part of certain terrorist entities or their aiders and abettors. Hard power encompasses but goes beyond military operations. It also includes economic and financial sanctions, covert operations, and law enforcement actions.

# Influencing in Action: Applying the Framework

Turning to specific cases, this section illustrates how the "influencing framework" could be implemented. The discussion focuses first on influencing the al-Qaeda core leadership and then on possible state, criminal, and individual aiders and abettors.

# The al-Qaeda Core Leadership

Efforts to influence the WMD calculus of the al-Qaeda core leadership — Osama bin Laden, Ayman al-Zawahiri, and their close associates in al-Qaeda center presumed to be located on the Pakistan-Afghanistan border — are the toughest case. As already noted, their writings and statements as well as those of individuals closely linked to them make clear that in their view, even indiscriminate killing using nuclear or biological weapons is seen as fully *legitimate and justifiable*. Howsoever falsely, their writings contend that WMD use is fully consistent with the Koran and the teachings of the Prophet. Thus, once in possession of WMD, the core leadership would have no moral or religious compunctions concerning use. For them, there is no controversy about the legitimacy or morality of using WMD against all enemies even if it results in loss of life among Muslims.<sup>2</sup> This leverage point simply does not apply.

Actions to influence the leaders' perceptions of the risk of escalat-

<sup>&</sup>lt;sup>2</sup> See the discussion in Rebecca Givner-Forbes, "To Discipline the Savage Cowboys – An Analysis of Weapons of Mass Destruction in Jihadist Primary Documents," in Lewis A. Dunn (ed.), Next Generation Weapons of Mass Destruction and Weapons of Mass Effect Terrorism, op. cit.

ing to WMD violence would have somewhat greater but still limited applicability. For the past decade, the United States has sought unsuccessfully either to capture or kill both bin Laden and al-Zawahiri. Particularly during the period when they were "on the run," they would likely have discounted any additional threats of capture or death. Now that the al-Qaeda core leadership appears to be recreating a base of operations on the Pakistan-Afghanistan border – and now that the Taliban is gaining strength in Afghanistan – the two leaders could be more concerned about the risks of WMD use. For such use could well provide an powerful argument for the United States to use with its NATO allies that these countries should step up greatly their on-the-ground military commitment to defeating the Taliban. After WMD use, Pakistan also could well come under irresistible U.S. and international pressure to take effective measures against al-Qaeda-Taliban safe-havens – or to turn a blind eye to stepped-up U.S. special operations in those regions.

By contrast, a much more promising leverage point would be the core leadership's perception of whether acquisition and escalation to WMD use would be *smart*. In part, smartness is tied to the leadership's assessment of whether WMD acquisition and use would be a feasible and effective use of the organization's resources as well as whether WMD use would shatter American resolve and lead to the elimination of U.S. influence from the Muslim world. Smartness also entails the leadership's calculation of whether escalation to WMD violence would alienate al-Qaeda's wider Islamic audience and make it all the more difficult to achieve its goals of an Islamic renewal and a new Islamic Caliphate. In different ways, each of these dimensions of "smartness" is subject to potential influence.

<u>Influencing Actions</u>. With regard to perceptions of *feasibility and use of resources*, many denial actions already are being taken to make it much harder for any terrorist group to acquire or use WMD successfully. The Cooperative Threat Reduction program and its wider counterpart the G-8 Global Initiative, the newer Global Initiative to Combat Nuclear Terrorism, and implementation of United Nations Resolution 1540

(which obligates all states to put in place controls against WMD access by non-state actors) are but a few highly-visible examples. There are, of course, gaps in these prevention efforts which still need to be addressed. Even so, U.S. and global pursuit of these types of prevention, interdiction, and consequence management actions all would create uncertainties in the al-Qaeda leadership about the feasibility and impact of WMD acquisition and use. As such, they all send the message to the core leadership that it would be smarter to invest its scarce resources in the more proven "bombs and bullets" modes of attacks that have long been at the core of its operational code.

Still other actions would be intended to influence the core leadership's perception of whether escalation to WMD use would shatter U.S. political will and resolve. Continued actions to build habits of global cooperation against WMD terrorism would be one way to signal the core leadership that WMD use would not defeat the United States and its allies. Indeed, visible global cooperation would suggest that escalation to WMD violence could well rally other countries to the American side, much as occurred after the 9/11 attacks on the World Trade Center and the Pentagon. Enhanced consequence management capabilities also would be important. Plans, procedures, and capabilities to manage successfully the physical, psychological, social, and economic consequences of a WMD attack – and more generally to foster public resiliency – are desirable in their own right. But they, too, could contribute to influencing the core leadership's WMD calculus. Again, for influencing purposes, these actions need to be made highly visible. Not least, the outcome of the Iraq War is likely to be a key factor in shaping perceptions of U.S. resolve for better or for worse. If al-Qaeda in Mesopotamia is defeated and a measure of stability restored, it will be a major al-Qaeda defeat and a demonstration of American resolve.

Finally, actions also should be taken to heighten concerns that WMD use would *provoke a backlash among the wider Muslim audience* that the al-Qaeda core leadership seeks to rally to its cause. One way to do so would be to encourage more moderate Muslims at all levels to condemn

WMD use. Across the global Muslim community, as reflected in recent public opinion data, there is widespread rejection of Jihadist attacks on innocent civilians, including American civilians.<sup>3</sup> Though it would be difficult and probably counter-productive for U.S. officials to do so directly, the United States should work with friendly Muslim government to encourage Islamic religious associations and prominent clerics to speak out against al-Qaeda's escalation to WMD violence. In turn, a wider theological debate on the issues of the justifiability and legitimacy of WMD use should be encouraged, again with the aim of creating uncertainty in the minds of the core leadership about their audience's response to mass killing using WMD.

This last set of actions to influence the core leadership's perceptions of smartness is perhaps the most controversial. Some U.S. experts argue that bin Laden and al-Zawahiri ultimately arrogate to themselves the right to act on behalf of the right-thinking Muslim community. Thus, they would not be influenced by any such concerns about Islamic public attitudes. Instead, they would assume that if WMD use had the desired decisive impact, their Muslim audience would rally behind al-Qaeda's decision.<sup>4</sup>

Nonetheless, there are good reasons to believe that the core leadership is concerned about how its wider Muslim audience would respond to mass killing and use of WMD. Its investment of considerable energies in arguing for the legitimacy of WMD use is but one indication that there has been push-back on this question. Indeed, the most authoritative Jihadist religious discourse on this subject, the May 2003 *fatwa* by a Saudi cleric linked to bin Laden, Nasir bin Hamd al-Fahd, acknowledges such questions about killing innocent civilians. Al-Fahd refers explicitly to "specious arguments" against the use of WMD before seeking to counter each of those arguments.<sup>5</sup> In addition, in his October 11, 2005 letter to

<sup>&</sup>lt;sup>3</sup> See Steven Kull, Principal Investigator, "Muslim Public Opinion on U.S. Policy, Attacks on Civilians and al Qaeda," WorldPublicOpinion.ORG, University of Maryland, April 24, 2007, pp. 9-13, passim.

<sup>&</sup>lt;sup>4</sup> These points were emphasized to the author by an expert in an earlier not-for-attribution discussion of influencing terrorists' WMD acquisition and use calculus.

<sup>&</sup>lt;sup>5</sup> See Nasir bin Hamd al-Fahd, "A Treatise on the Legal Status of Using Weapons of Mass Destruction against Infidels," May 2003.

Musab al-Zarqawi, Ayman al-Zawahiri expressed concern about the excessive violence of al-Qaeda in Iraq and went on to emphasize that:

If we are in agreement that the victory of Islam and the establishment of a caliphate in the manner of the Prophet will not be achieved except through jihad against the apostate rulers and their removal, then this goal will not be accomplished by the mujahed movement while it is cut off from public support...

Al-Zawahiri continued that "[t]herefore, the mujahed movement must avoid any action that the masses do not understand or approve, if there is no contravention of Sharia in such avoidance, as long as there are other options to resort to." Somewhat similarly, Osama bin Laden spoke out in his October 23, 2007 audiotape against the "fanaticism" of the "mujahidin in Iraq," stressed that "[t]he strength of the faith is the strength of the bond between Muslims and not that of a tribe or nationalism," and urged that "the interest of the Umma should be given priority." This message again highlights the extent to which the al-Qaeda core leadership is sensitive to the impact of its actions on the wider Muslim community. For all of these reasons, therefore, seeking to reinforce concerns that WMD use would backfire should be part of an influencing strategy aimed at that leadership.

Other al-Qaeda and Non-Al-Qaeda Terrorist Entities. Space precludes a comparable discussion of influencing either the other entities that make up the al-Qaeda-Jihadist movement or the many non-Al-Qaeda terrorist groups (whether Islamist or not). Suffice it only to state here that across these other different terrorist groups and their component entities, perceptions of the more instrumental aspects or "smartness" of WMD acquisition and use again appear to be the most promising leverage point. In turn, most of the specific influencing actions identified above – from denial measures

<sup>6 &</sup>quot;Letter from al-Zawahiri to al-Zarqawi," October 11, 2205, Released by the Office of the Director of National Intelligence, ODNI New Release No. 2-05, pp. 4, 5.

<sup>&</sup>lt;sup>7</sup> "Osama bin Laden, "A Message to the People of Iraq," October 22, 2007, Translation of bin Laden's message, Aljazeera.net, October 23, 2007.

<sup>&</sup>lt;sup>8</sup> For elaboration see Dunn, "Influencing Terrorists' WMD Acquisition and Use Calculus" in "Next Generation WMD and WME Terrorism," Section 3 – Part 2.

to creating uncertainties about the possible blowback from their supporters – also offer means to influence these other groups' calculus. In addition, particularly for those non-al-Qaeda groups and entities that in the future could come to think about WMD acquisition and use, e.g., Hamas or Hezbollah among Islamist groups or the Tamil Tigers among non-Islamist groups, actions to influence their own perceptions not simply of the "smartness" but also of the justifiability and legitimacy of WMD use should not be dismissed out of hand. At least for now, unlike al-Qaeda, these non-al-Qaeda groups have not developed a line of argument to square WMD use and mass killing with their core religious, moral, and political beliefs.

#### Aiders and Abettors

Turning to aiders and abettors, consider first possible state supporters. Two objectives stand out: on the one hand, the United States and likeminded countries should continue to take steps to encourage actions by state officials to prevent unauthorized or unwitting support to terrorist WMD acquisition and use and on the other, to dissuade official, authorized, and witting support by a state's leadership to a terrorist WMD attack. As above, what leverage points and associated influencing actions stand out?

State Supporters. Leaders' perceptions that direct support for terrorist acquisition of WMD (or indirect support by not acting to put in place effective controls against diversion) would not serve their personal or national goals are one potential leverage point. Equally so, concern about the possible personal risks, especially of witting rather than unwitting support, is another leverage point. A belief that assistance to WMD terrorism is neither justifiable nor legitimate state behavior – and conversely, that it is international "good behavior" to take actions to prevent unintended or unintentional support from within their countries – also could shape the policies of leaders and elites in most if not virtually all states.

Given these leverage points, the May 2008 statement by U.S. National Security Advisor Stephen Hadley that "the United States will hold any state, terrorist group, or other non-state actor or individual fully accountable for supporting or enabling terrorist efforts to obtain or use

weapons of mass destruction — whether by facilitating, financing, or providing expertise or safe haven for such efforts" is an important initial step. The United States should now seek other countries' support for this type of "holding accountable" declaratory policy and posture. Going a step further, it could be desirable to seek a United Nations Security Council Resolution stating the international community's readiness to hold accountable aiders and abettors — or supporters and enablers, to use the Hadley formulation — of terrorist acquisition or use of WMD. Short of a Security Council resolution, the five permanent members of the Security Council — the United States, Russia, the United Kingdom, France, and China — could make a common holding accountable declaration.

How the United States and like-minded countries would implement a holding accountable policy would need to be determined in the specific situation. Sufficient flexibility should be retained to adapt the response to different degrees of witting or unwitting state leadership involvement, the relative certainty with which a particular terrorist WMD attack or attempted attack could be tracked back to those leaders, the outcome of the attack, and other unique situational dimensions. The credibility and wider acceptability of a holding accountable policy, moreover, calls for making clear that there is a very wide range of means to use to implement it - and not simply or exclusively military means. In a situation entailing unwitting state support for an unsuccessful terrorist WMD attack, for example, the response might be to demand that the state's leadership join with the United States and others to take needed security measures to prevent any repetition as well as to punish the perpetrators. By contrast, in the case of clearly established, witting involvement by a state's highest leadership, military action proportional to the damage inflicted by the terrorist WMD attack could be warranted. 10

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<sup>&</sup>lt;sup>9</sup> Remarks by National Security Advisor Stephen J. Hadley at the Proliferation Security Initiative Fifth Anniversary Senior Level Meeting, Washington, D.C., May 28, 2008.

<sup>&</sup>lt;sup>10</sup> Even assuming a military response to a WMD attack, there would be many options open to the United States short of responding with nuclear weapons. Though obvious given U.S. conventional capabilities, this point needs to be made because some persons have already asserted that the U.S. declaratory policy of "holding accountable" is tantamount to threatening a nuclear response against enablers and supporters of a terrorist WMD attack on the United States.

Continued actions to build up habits, institutions, and mechanisms of international cooperation against WMD terrorism are another important influencing action. The International Convention for the Suppression of Acts of Nuclear Terrorism and United Nations Security Council Resolution 1540 – as well as the Global Initiative to Combat Nuclear Terrorism – are three such examples. Building these habits of cooperation would help to create a presumption in the minds of possible state supporters that the international community would act against them. It also would make it easier for all states to take needed actions to prevent unintentional assistance.

The relative effectiveness of these types of efforts to influence state leaders' calculations clearly would depend on the perceived ability of the United States and other countries, possibly in collaboration with international organizations, to track a terrorist WMD attack back to the source. Unless the aiders and abettors can be identified, it will not be possible to hold that state's leaders accountable. Attribution will depend partly on technical forensics. It also would entail cooperation among intelligence and law enforcement authorities both in the United States and abroad. Attribution already is being emphasized as part of U.S. counter-terrorism actions and a Working Group on the subject exists under the U.S.-Russian Global Initiative to Combat Nuclear Terrorism. In support of an influencing strategy, it would be desirable to publicize advances in the attribution capabilities and cooperation of the United States and other nations, to the extent possible without compromising sensitive technical information. Additional exercises and table-top games on the subject of attribution also would showcase and build habits of cooperation in this area.

<u>Criminal Organizations</u>. For criminal organizations, perceptions of risk stand out as the most compelling potential leverage point to convince them that the dangers of aiding and abetting a terrorist organization's acquisition or use of WMD far outweigh possible financial or other gains – whether risk to the organization as a whole or to specific members. Continued actions to build habits of global cooperation against WMD terrorism would be one means to signal the risks of helping a terrorist organ-

ization to acquire or use WMD. Strengthening national legal mechanisms as well as procedures for international legal collaboration against WMD smuggling would be another such means. Here, both the International Convention to Suppress Acts of Nuclear Terrorism and United Nations Security Council Resolution 1540 provide a framework for accelerated action. Highly-publicized actions — whether legal prosecutions or more direct action — against criminal organizations tied to terrorist pursuit of WMD also could be taken.

More unconventionally, likely informal if unacknowledged back-channels could be used to tell criminal organizations and their membership that the authorities would not tolerate aiding and abetting terrorist WMD acquisition and use – even if corrupt officials might have been prepared to look the other way at other types of smuggling. In turn, background briefings to the press as well as other means could be used to manipulate fears that personal injury to the smugglers themselves might result from engaging in this type of illicit trafficking even if they were not caught, e.g., from exposure to radiation in the case of nuclear smuggling or lethal disease from biological agents.

Individual Aiders and Abettors. <sup>11</sup> Particularly for those individuals that might become unintentionally involved, a desire not to have innocent blood on their hands could be a potential leverage point. Perceptions of feasibility also could provide leverage, particularly the prospects for successfully trading WMD-related materials, know-how, or access for financial or other personal gain. Nonetheless, given likely motivations, actions aimed at influencing individuals' perceptions of risk may be the most promising leverage point.

Turning to specific influencing actions, steps to enhance national controls and to implement United Nations Security Council Resolution 1540 in that area would be one means to shape perceptions of the likeli-

<sup>11</sup> This category partly overlaps with the two preceding ones to the extent that states and criminal organizations are made up of individuals. Nonetheless, it warrants separate treatment because potential individual aiders and abettors need not be either senior state officials or members of a criminal organization.

hood of success. Encouraging different technical communities, especially in the biological sciences area, to develop their own codes of conduct could help strengthen individual awareness and responsibility. Not least, actions are needed to *influence individuals' perceptions of the personal risk* of indirectly or directly aiding or abetting terrorists' acquisition or use of WMD.

Here, too, a place to start is explicit declaratory policy statements by the United States and other countries that they would join together to hold individuals accountable for such WMD-related activities. Highly publicized actions by states to put in place needed legal authorities and other mechanisms to allow cooperation to apprehend and/or extradite or prosecute WMD aiders and abettors also would signal heightened risks. Going a step further, states could cooperate to make examples of publicly known figures involved in helping non-state actors seek or gain access to WMD materials or know-how – or in other WMD-related smuggling or illicit networks. Well-publicized prosecutions would be one means to do so; more direct covert action against such individuals could be another. Again the purpose would be to cause other potential aiders and abettors to reassess the risks of such action.

# A Concluding Thought

Many different U.S. and international actions to counter the threat of WMD terrorism by preventing terrorist access to WMD-related materials or weapons are currently being pursued. These prevention activities are the first line of defense against WMD terrorism – and should be vigorously pursued and where needed, strengthened.

This paper has set out a complementary strategy for deterring – or better put, influencing – terrorists' acquisition and use of WMD. It has also sketched how that strategy could be applied in two key cases: that of the al-Qaeda core leadership and that of possible aiders and abettors of any terrorist WMD attack. More important, though differences in their susceptibility to influence clearly exist, for all of today's terrorist groups and entities, one or more potential leverage points can be identified – along with

associated influencing actions. This includes the toughest case of the al-Qaeda core leadership. In turn, potential leverage points and actions can also be identified for influencing those aiders and abettors that could tip the balance between a failed and a successful terrorist WMD attack, including state supporters, criminal organizations, and individuals. Thus, the prospects for successfully influencing terrorists' WMD acquisition and use calculus – as well as aiders and abettors – could well be considerably greater than might be initially assumed.

Application in practice of such an influencing strategy will call for a number of enabling actions, from developing more detailed knowledge of the thinking and workings of particular terrorist groups to enhanced technical-political capabilities for attribution of the source of a terrorist WMD attack – including possible involvement of aiders and abettors. The task will be a challenging one. However, pursuit of such an influencing strategy also can leverage the many other efforts to counter the threat of WMD terrorism, not least prevention and denial writ large.

By way of conclusion, the argument of this paper is quite clear. Put most simply, the time has come to pursue a strategy to influence the WMD calculus of terrorist groups and their aiders and abettors. An influencing strategy can be a valuable adjunct to the overall set of U.S. and global actions to counter WMD terrorism. Influencing actions is part of the answer to dealing with the threat of a terrorist WMD attack against the United States, one of its friends or allies, or any other country around the globe.

# EMERGING CONCEPTS OF DETERRENCE IN THE 21<sup>ST</sup> CENTURY

# Joachim KRAUSE\*

Deterrence to a certain degree was a critical concept during the period of the East-West conflict. It was critical for Western defense strategy, but it was also criticized because of the negative consequences of nuclear war. After 1990 the concept of deterrence almost disappeared from the political agenda. With the changing international system and the amount of uncertainty involved, it is returning to international politics. This paper tries to identify some areas where concepts of deterrence have reappeared in the past few years. It tries to reflect the main arguments of the various debates, and it suggests an approach towards their systematisation. The paper is based on a review of the pertinent literature and of relevant strategic and political debates in the Western world as well as other parts of the world.

Deterrence is no longer a rather simple and unified concept as it was during the East-West conflict. Today, there are in principle three different areas where the debate on deterrence is back again and where we could expect that this debate to continue. In each of them the concept of deterrence means something different, and in each of them the political implications have to be looked at from a different angle:

1) There is a debate about *nuclear deterrence* between the nuclear weapon states Russia and the United States, in particular about mutual assured destruction (MAD). This debate is an offspring of the nuclear non-proliferation discussion, but it has serious repercussions for the debate in the US about the logic and legit-

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- imacy of strategic nuclear deterrence vis à vis Russia and China as well as for the logic of nuclear deterrence at all.
- 2) There is a debate about the *security problems that individual NATO member states have* with regard to their territorial integrity. They have neighbours which, for different reasons, pose serious problems, for which more or less "traditional" deterrence solutions might be applicable.
- 3) There is a debate about the role of the Western community in upholding and further developing the existing international order and about how to deter *actors that try to defy this international order*.

While the second debate sounds traditional, the two others necessitate innovative political and strategic reasoning. Both are politically sensitive and demand a careful approach. All three areas are distinct from each other; however, they are interrelated to a certain degree. In addressing deterrence issues in all three areas – in particular in the third area – one has to be aware that in the debate the traditional dichotomy of deterrence – either by punishment or by denial – seems to lose its meaning. What we can see is rather the emergence of new concepts of deterrence which go beyond the traditional logic of either punishment or denial.

### The three areas of the debate

## Nuclear deterrence among the P5

The current debate about nuclear deterrence, in particular about mutual assured destruction, comes from the nuclear non-proliferation field. After the end of the East-West conflict many have asked why it is necessary for both Russia and the US to maintain nuclear arsenals of more than ten thousand individual warheads, some of them on a high level of alert. Washington and Moscow have in recent years argued that they had already committed themselves to drastic reductions of their nuclear arsenals in the May 2002 Moscow Treaty, also known as the Strategic Offensive Reductions Treaty (SORT). Critics, however, rightly point to the fact that these figures are still much higher than those of the other P-5 states. What is often overlooked is that the issue at hand cannot be resolved as long as

there is no clarity about the nature of the concept of deterrence. Indeed, there are limits to further nuclear arms reductions when both the US and Russia stick to concepts of deterrence and corresponding nuclear doctrines that are still based on massive annihilation of military and civilian targets.

The SORT figures – a reduction to 1,700 to 2,200 operationally deployed strategic nuclear weapons on each side by 31 December 2012 – still are based on the concept of *Mutual Assured Destruction* (MAD). The basic issue is not so much the sheer numbers, but the doctrines and strategies behind them. Many have termed Mutual Assured Destruction *Mutual Assured Genocide*, and it surely is odd to stick to such a concept when politicians in both the US and Russia time and again repeat the statement that they see no strategic enmity between their countries. President George W. Bush, when he campaigned in 2000, made the transition from Mutual Assured Destruction toward Mutual Assured Security a major issue. However, he did not make good on his promises.

The five NPT-recognized nuclear weapon states have so far not been eager to lead a debate on this issue. This has led to a situation where the debate has been shaped by more or less populist formulas. In particular the Non-Aligned movement, but also many neutral and many Western European states today harbour the idea that the only solution to this problem is total nuclear weapons elimination. This is problematic for two reasons. First, these voices tend to ignore the fact that total nuclear weapons elimination is not simply a matter of volition and good will, but something that has to be measured against potential dangers and risks. Radical measures can often do more harm than good. Second, the more this debate is linked with that about the implementation of the Nuclear Nonproliferation Treaty, the greater the danger that this treaty will be re-interpreted as if it were a disarmament treaty. This re-interpretation has been under way since the 1990s, and it is leading the NPT community on to a slippery road, where the very existence of the treaty is at stake.

What is needed is an innovative debate about the scope for major and drastic reductions of nuclear weapons as a consequence of radical doctrinal and strategy changes, which all have to be the result of negotiations among the five NPT-recognized nuclear weapon states, in particular between the US and Russia. The beginnings of such a debate are there. One might consider, for example, the articles published by Henry Kissinger, William Perry, George Shultz and Sam Nunn in the *Wall Street Journal*.¹ Both presidential candidates in the US have spoken out in favour of major nuclear arms reductions. Even the London-based International Institute for Strategic Studies (IISS) has established a working group on nuclear disarmament. There are also proposals from the 1990s that need to be taken up (virtual nuclear arsenals). The important point is that this debate has to come from the nuclear weapons states and that at least the intention to drastically alter current nuclear deterrence strategies must be at the centre of these efforts.

The basic elements of such an effort could be reduced to three objectives: (1) an understanding of nuclear deterrence as something existential and limited to the prevention or termination of really big wars; (2) an understanding that, for this purpose, the numbers of nuclear weapons can be kept to very low levels (100 to 200 warheads) and that there would be no need to keep them on constant alert (rather, it would be politic to keep them as "virtual nuclear weapons" that can only be employed after some time); and (3) mechanisms against cheating and pre-emption (for instance, missile defense, a ban against certain types of missiles, and improved safeguards for states that have the capabilities to build nuclear weapons). In pursuing such an effort the nature of nuclear deterrence would be transformed in a way that would ensure that massive reductions of nuclear weapons could be accomplished. Whether this is a realistic set of objectives, given the current state of affairs between the US and Russia, remains an open question. However, the issue remains pertinent, and some solution will have to be found.

# Re-emergence of traditional deterrence problems

At least a couple of new - and possibly also old - NATO member

<sup>1</sup> George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, 4 January 2007; and George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn, "Toward a Nuclear-Free World," *Wall Street Journal*, 15 January 2008.

states today discern threats to their security that sound familiar or which are partially new. Some of them seem to consist of traditional security problems which, in the past, had been subject to deterrence strategies. Among them are concerns with regard to energy security (Poland and the Baltic states), the blatant threats by Russia against Poland and the Czech Republic (if they should allow the stationing of US missile defence components), and the repeated hints by Russia that it might proceed more aggressively in protecting ethnic Russian populations in the Caucasus, Moldova, Ukraine, and the Baltic states. This debate also has to acknowledge that there are member states of NATO which are confronted with a Russian invasion capability – something that should have been avoided after the conclusion of the CFE Treaty.

The recent crisis over the frozen conflicts in Georgia (Abkhazia and South Ossetia) has shown that states neighboring Russia often face the problem that Moscow can exploit internal ethnic strife in order to regain political control or to find a pretext for an armed intervention. Deterrence in this regard would be much more complex than it was during the East-West conflict. It would include preventive diplomacy and enlargement strategies as well as putting up credible hurdles against Russian interventions. Deterrence also has to be applied to situations where the Russian leadership is trying to intimidate or blackmail neighboring states with the threat to cut off oil or gas supplies.

So far, there is nothing within the toolbox of Western deterrence strategy that suggests itself, but we have to think in terms of such contingencies – and we have to be innovative and creative in devising new instruments of deterrence. Such a new toolbox must include political as well as military means – and these means will have to be subtle rather than brutal. The emphasis, therefore, should not be on nuclear deterrence but on more or less subtle ways to force the Russians to renounce neo-imperial ways of dealing with their neighbors. In this regard alliance members will have to ponder options that might include the improvement of air defences in the Baltic States and Eastern Europe as well as the further integration of the local armed forces into NATO (including the stationing by mutual agree-

ment of troop contingents from "old" NATO members on the territory of "new" member states). It seems certain that after the Russian invasion of Georgia in August 2008 such a debate will begin.

Traditional types of threats might also show up as a consequence of Iran acquiring nuclear weapons and long-range missiles. In a decade or so, Iran might be able to threaten Europe with such weapons. The issue here is: what to do? How can NATO deter Iran from making such threats, or even from implementing them? How can NATO deter extremist forces from attacking Western countries with non-traditional means? Again, we will see that traditional and non-traditional means of deterrence will have to be mixed in dealing with such a threat.

## Deterrence and international order

Most contributions to the deterrence debate today, however, have to be seen in a context quite different from the contingencies mentioned above. They refer to states that should be deterred from violating international treaties or from thwarting international reconstruction efforts. They deal with deterrence of attacks against petroleum infrastructure as well as of attempts by warlords and rogue actors to take over territory from which terrorists or pirates might operate quite safely.

These different proposals for deterrence might be grouped in a special category. All have in common the fact that they refer to a certain degree to issues relating to international order. If one accepts Hedley Bull's definition of international order, according to which an order is an anarchical society in which the participating states agree on a certain set of rules and procedures to pursue common goals (such as peace or the prevention of war), there might be reason to argue that we have a rudimentary form of international order that consists of the following components:

- The acceptance of the rule of the non-use of force in interstate relations;
- The acceptance of free trade as a cornerstone of relations among nations;
- International cooperation in dealing with security problems worldwide (including mediation, peacekeeping, peace-building, and post-conflict

reconstruction); and

• The need to protect existing international norms and legal instruments against those defying them.<sup>2</sup>

Upholding an international order requires a group of powerful and determined states that are ready to defend that order and that recognize – in particular if they are composed of democratic governments – the need to legitimize their actions. This legitimization could be achieved by resorting to the concept of *deterrence*. In this regard, deterrence means preventing malevolent actors (or *revolutionary actors*, in the language of Kissinger) from destroying that rudimentary international order.<sup>3</sup>

Deterrence measures have been proposed on various occasions to deal with these kinds of threats. Some measures could prevent states from using military force against other states (China against Taiwan, Russia against Georgia, Iran against Gulf Cooperation Council states, Venezuela against Colombia). Other measures could deter Iran from acquiring nuclear weapons or from using them against Israel, as Senator Clinton said in a recent speech.<sup>4</sup> There are also proposals on how to deter states such as Iran from supporting insurgents and on how to deter terrorists from spoiling international cooperative efforts in Iraq and Afghanistan.

### The New Dimensions of Deterrence

In taking up this broader debate about deterrence, one also has to be aware of the fact that within this debate the notion of deterrence is undergoing some change. Traditionally we are used to the basic difference

<sup>&</sup>lt;sup>2</sup> Hedley Bull, *The Anarchical Society: A Study of Order in World Politics*, 2nd edition (New York: Columbia University Press, 1995).

<sup>&</sup>lt;sup>3</sup> Henry Kissinger, A World Restored: Metternich, Castlereagh and the Problems of Peace, 1812-22 (Boston: Houghton Mifflin, 1957).

<sup>&</sup>lt;sup>4</sup> Senator Hillary Clinton said on 22 April 2008, "I want the Iranians to know that if I'm the president, we will attack Iran. . . . In the next 10 years, during which they might foolishly consider launching an attack on Israel, we would be able to totally obliterate them. . . . That's a terrible thing to say but those people who run Iran need to understand that because that perhaps will deter them from doing something that would be reckless, foolish and tragic." David Morgan, "Clinton says U.S. could 'totally obliterate' Iran," Reuters dispatch, 22 April 2008, available at http://www.reuters.com/article/wtMostRead/idUSN2224332720080422.

between deterrence by punishment and deterrence by denial. The former implies that the deterrent effect is provided by the threat – and the readiness of its eventual execution – of the destruction of targets of highest strategic value to the adversary. The latter means that one has to deny to an aggressor any reasonable goal he might hope to achieve by the use of military force. Both concepts remain valid; however, their very nature is changing. While punishment in the traditional sense during the East-West conflict mainly implied the use of strategic nuclear weapons on a large scale, today it is discussed in a less apocalyptic way. The way Saddam Hussein was punished, for instance, was by invading his country and ending his regime. Other forms of high-value target attacks without using nuclear weapons can be imagined.

The utility of nuclear weapons as a means of deterrence is, moreover, losing its importance for three substantial reasons: (1) the acceptance of nuclear deterrence within Western states is declining and there is hardly any chance that this trend might be reversed; (2) the larger the number of states that will have acquired the capability to produce nuclear weapons, the less useful deterrence threats based on nuclear weapons will become (which is a lesson that one has to draw from the 60 years of nuclear weapons- based deterrence strategy of the West); and (3) most foreseeable threats to the security of the NATO allies and their partners will be of a nature that would necessitate more or less subtle ways of deterrence. Hence we have to look at both traditional and innovative ways to produce deterrence in a much more complex world.

Against this backdrop one has to see that some new modes of deterrence have already come up during the debate and that some more will have to be devised. These include the following:

 Deterrence by denial will become more important than deterrence by punishment (at least in the traditional nuclear sense). However, the concept of denial will have to be expanded to a degree that seems to be odd for many traditional defense experts. Deterrence by denial should involve a lot of measures which are usually put under the heading of "conflict prevention". Their main purpose would be to deny some actors the ability to exploit domestic conflicts in unstable countries for their own aggressive purposes. By the same token, however, deterrence cannot be reduced to political means alone. On the contrary, the inventory of instruments of deterrence by military denial will have to be expanded, too. It also will have to encompass such controversial capabilities as missile defense. It will be extremely difficult to conduct such a debate within Western European states — in particular in Germany — but it seems to be unavoidable.

- Deterrence by economic and legal sanctions will therefore become more important. Sanctions can have a deterrent value, particularly if they are applied at a time when the use of military force would seem to be inappropriate. The relevance of such sanctions will increase the more the potential aggressor is seeking access to international markets – and the more he is dependent on such markets. This would be the most important means of deterrence if China became an open threat to its neighbors. However, the structure of those markets would have to be of a nature that would allow sanctions to have some kind of leverage. In an international market in which the demand side is relatively weak, for instance, the international market for crude oil or for gas, sanctions will hardly be useful against an oil-producing state. With regard to countries which deliberately refuse to open their economies to international markets, sanctions could only have meaningful effects in cases where the basic needs of the population would be affected. However, as the cases of Iraq (under Saddam Hussein) and North Korea have amply demonstrated, sanctions with extremely negative consequences for the "innocent" population will be difficult to sustain and their utility might be questionable too.
- Deterrence by demonstrating escalation dominance might become more relevant in the future. It could have been witnessed during the last Taiwan crisis, when US warships took up positions in the Straits of Taiwan. Their message was that any military action by the Chinese side might lead to an escalation that would put China at a disadvantage. Similar proposals have been made with regard to Iran and Russia recent-

- ly. The basic idea is to demonstrate to an aggressor that he might have to face escalation against an adversary that has much greater means available to respond than the aggressor.
- Deterrence by pre-emption (or the threat of pre-emption) will become much more important than in the past, despite its controversial character. This notion is part of the US National Security Strategy of 2002, and it has provoked a lot of criticism. But the basic concern behind it, how to deal with states building nuclear weapons or harbouring terrorist camps, remains valid. The controversies mainly have centred on the timing. Pre-emption should be understood in this regard as selective and discriminate military strikes directed at certain targets of concern that might otherwise turn into a major security threat.
- Deterrence by judicial prosecution and punishment might also be of relevance. This principle has been applied both multilaterally and bilaterally in order to punish certain individuals responsible for serious violations of international law, including humanitarian law. However, the deterrent value of threatening such punishment might be limited.

### Conclusion

These are just notes and ideas to frame a debate about deterrence that takes into account some other debates, such as those on nuclear non-proliferation, post-conflict rehabilitation, international order, regional conflicts, and the war against terrorism. The basic idea is that the notion of deterrence is back again, and that we have to be prepared for forms of deterrence that are less centred on nuclear weapons and that rely on subtle political, economic *and* military means of deterrence. Nuclear deterrence will not disappear, but its place in the arsenal of a Western deterrent strategy will be different from its place during the East-West conflict. We will also be confronted with deliberate attempts to counter our forms of deterrence with counter-deterrence.

## CONCEPTS OF DETERRENCE IN THE 21<sup>ST</sup> CENTURY: SOME THINGS OLD, SOME THINGS NEW

## Michael S. GERSON\*

The role of nuclear deterrence in national and international security has always been open to intense debate. Throughout the Cold War, many of these debates centered on how many and what kinds of nuclear (and conventional) forces were needed to deter the Soviet Union from undertaking nuclear, chemical, and conventional aggression. For example, whereas some argued that a handful of survivable high-yield countervalue weapons were sufficient to deter Soviet military adventurism, others contended that credible deterrence required a wide range of highly-accurate counterforce weapons capable of defeating Soviet forces and "winning" a nuclear war. Another important debate, largely begun after the collapse of the Soviet Union, examined the broad utility and efficacy of nuclear weapons and deterrence strategies in the Cold War. While some believe that mutual nuclear deterrence greatly contributed to bipolar stability and the absence of major war, others posit that deterrence strategies prolonged the Cold War and actually provoked the most dangerous crises of the superpower standoff; and still others argue that nuclear weapons were

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<sup>&</sup>lt;sup>1</sup> For analysis of the various schools of thought on the requirements of deterrence, see Charles L. Glaser, "Why Do Strategists Disagree about the Requirements of Strategic Nuclear Deterrence?" in Lynn Eden and Steven E. Miller, eds., *Nuclear Arguments: Understanding the Strategic Nuclear Arms and Arms Control Debates* (Ithaca: Cornell University Press, 1989), 109-171; and Patrick Morgan, *Deterrence Now* (Cambridge: Cambridge University Press, 2003), pp. 22-25.

essentially irrelevant to postwar peace.<sup>2</sup>

If there was no Western consensus on nuclear weapons and deterrence during the Cold War, it will be a daunting task to achieve a common view in today's international security environment. Since the end of the Cold War, the nature of the nuclear threat has changed. Instead of a single adversary in possession of thousands of nuclear weapons,<sup>3</sup> the threat today is from a handful of nations with nuclear forces of varying numbers and degrees of yield, survivability, geographic reach, and accuracy. In the United States, there has been considerable debate in recent years over if and how rogue states, terrorists, and emerging (and re-emerging) powers like China and Russia can be deterred.

For some, the transition from a bipolar to a multipolar nuclear world puts the basic concept and logic of deterrence on shaky ground. The issue is not just that there are more nuclear-armed states in the post-Cold War world, although it has been argued that an increase in the number of states possessing nuclear weapons increases the chances of nuclear war or accidents. Rather, much of the recent concern about the continued reliability of deterrence is based on the kinds of regimes that have acquired, or may acquire, nuclear arms.<sup>4</sup> If nuclear weapons spread to dictatorial,

<sup>&</sup>lt;sup>2</sup> On the stabilizing effects of nuclear weapons in the Cold War, see, for example, Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca: Cornell University Press 1989); John Lewis Gaddis, "The Long Peace: Elements of Stability in the Postwar International System," *International Security* (Spring 1986): 99-142; and Kenneth N. Waltz, *The Spread of Nuclear Weapons: More May be Better*, Adelphi Paper, No. 171 (London: International Institute for Strategic Studies, 1981). On the dangerous situations involving nuclear weapons, see Richard Ned Lebow and Janice Gross Stein, *We All Lost the Cold War* (Princeton: Princeton University Press, 1994). John Mueller has most forcefully and persuasively argued that nuclear weapons were essentially irrelevant to the Cold War peace. See Mueller, "The Essential Irrelevance of Nuclear Weapons: Stability in the Postwar World," *International Security* (Autumn 1988): 55-79; and Mueller, *Retreat from Doomsday: The Obsolescence of Major War* (New York: Basic Books, 1989).

<sup>&</sup>lt;sup>3</sup> This analysis concentrates on NATO's major deterrence concern during the Cold War — the Soviet Union — and therefore omits China.

<sup>&</sup>lt;sup>4</sup> The focus on regime type has been especially prevalent in the George W. Bush administration. See, for example, Robert Jervis, "Understanding the Bush Doctrine," *Political Science Quarterly* (Fall 2003): 365-388; David Holloway, "Deterrence, Preventive War, and Preemption," in George Bunn and Christopher F. Chyba, eds., *U.S. Nuclear Weapons Policy: Confronting Today's Threats* (Washington: Brookings Institution Press, 2006), p. 48-50; and Robert S. Litwak, "Nonproliferation and the Dilemmas of Regime Change," *Survival* (Winter 2003-2004): 7-32.

repressive, and theocratic regimes, the argument goes, traditional conceptions of deterrence developed and practiced during the Cold War may not be valid, or, at least, sufficient. According to the 2002 National Security Strategy of the United States of America, "deterrence based only upon the threat of retaliation is less likely to work against leaders of rogue states more willing to take risks, gambling with the lives of their people, and the wealth of their nations."<sup>5</sup>

Underpinning many of these debates are basic beliefs about the utility of Cold War concepts of deterrence, and the applicability of deterrence lessons gained from Cold War experiences. Few argue that we should completely ignore the foundations of deterrence theory developed in the 1950s and early 1960s, or that we should discard our history books because the lessons of history are irrelevant to understanding modern challenges. Instead, the fundamental questions are just how much we should rely on concepts developed in a bipolar nuclear world, and which lessons from the Cold War might be used as a guide for current and future decision-makers.

These are complicated questions, and any answers will necessarily be open to interpretation and debate. The purpose of this paper is to shed some light on these issues by exploring a few of the fundamental concepts of Cold War deterrence in the context of the modern international security environment. This paper discusses some of the recent discourse about the history of the Cold War and examine deterrence concepts within the context of the current international balance of military power.

Many of the fundamental concepts of deterrence from the Cold War (and the debates that surrounded them) remain relevant today. The core logic and dilemmas of nuclear weapons and deterrence from the Cold War – deterrence by punishment and deterrence by denial, counterforce and countervalue targeting, compellence, crisis stability, arms race stability, preemption, credibility, and the stability-instability paradox, to name a

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<sup>&</sup>lt;sup>5</sup> The National Security Strategy of the United States of America, September 2002, p. 15.

few – remain important and relevant today. However, while it is a mistake to assume that the logic of deterrence is completely different today from that in the Cold War, it is equally problematic to assume that past deterrence concepts and strategies will work today exactly as they did during the U.S.-Soviet standoff. Not everything is different, but not everything is the same. Because of important changes in the international security environment since the end of the Cold War, the way in which deterrence strategies are applied, and the outcomes that these strategies produce, may pose important challenges to successful deterrence. In some cases today's deterrence dilemmas may be similar to Cold War challenges, and in others they are likely to be different. By analyzing modern deterrence through the lens of a few Cold War concepts, this paper identifies some challenges to effective deterrence in the current strategic environment, and suggests some potential solutions.

## Deterrence in the Cold War: Myths and Reality

Almost every discussion about the future of deterrence begins with an assessment of deterrence in the Cold War. Given the centrality of deterrence throughout this period – and because the theory of deterrence was developed in detail in during this time – this is a natural place for most analysts to begin. Yet some of the recent discourse about deterrence in the Cold War is based on an inaccurate reading of history. These historical narratives are primarily based on two myths about deterrence in the Cold War: the "confidence" myth and the "MAD" myth. These myths oversimplify the practice of deterrence during the Cold War and have been used to draw some sharp – and, as this paper shows, largely inaccurate – distinctions between the Cold War and today. In order to begin to determine which, if any, deterrence concepts and lessons can be usefully drawn from the Cold War, it is imperative to understand how decision-makers actually thought about and operationalized deterrence in past circumstances.

The "confidence" myth refers to the belief that U.S. and NATO officials had substantial faith in the power of deterrence. According to this view, the Allies believed that successful deterrence of the Warsaw Pact was relatively easy to achieve, and once both sides had deployed survivable

second-strike forces, they rested comfortably under the mutual nuclear "balance of terror." According to Keith Payne, "we believed we had great insight into the thinking of the Soviet leadership, could communicate well with its officials, and that those leaders ultimately would behave in well-informed and predictable ways. Consequently, we could be wholly confident deterrence would 'work.'"<sup>6</sup>

The "MAD" (mutually assured destruction) myth reflects another misconception about deterrence strategy in the Cold War, specifically that U.S. and NATO operational nuclear doctrine – in other words, how nuclear weapons would be used if deterrence failed – was principally based on the "Assured Destruction" criteria, which called for the destruction of 50% of industrial capacity in the Soviet Union and 25-30% of the Soviet population. This perspective assumes that nuclear doctrine was inflexible and primarily focused on destroying countervalue, rather than counterforce, targets. In the United States, this view of Cold War nuclear doctrine has been used to bolster arguments for the development of a new generation of highly accurate, low-yield counterforce nuclear weapons. According to one analyst, the U.S. needs a new crop of low-yield counterforce weapons because "traditional Cold War-style threats of massive retaliation" are unlikely to be a credible deterrent against rogue states. §

The history of nuclear deterrence in the Cold War, now partially available through the declassification of many high-level government documents, reveals a more complex picture of deterrence and nuclear doctrine than these myths convey. Regarding the "confidence" myth, U.S. and NATO officials constantly worried about the potency, longevity, and credibility of deterrence — especially extended deterrence — throughout the Cold War. To be sure, policymakers and defense officials

<sup>6</sup> Keith B. Payne, "Nuclear Deterrence for a New Century," *Journal of International Security Affairs*, (Spring 2006), 53.

<sup>&</sup>lt;sup>7</sup> See, for example, Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton: Princeton University Press, 1989), pp. 11-13; and Aaron L. Friedberg, "The Evolution of U.S. Strategic 'Doctrine:' 1945 to 1981," in Samuel P. Huntington, ed., *The Strategic Imperative: New Policies for American Security* (Cambridge: Ballinger Publishing Co., 1982), pp. 54-56.

<sup>&</sup>lt;sup>8</sup> Jason Zaborski, "Deterring a Nuclear Iran," Washington Quarterly (Summer 2005), p. 163.

believed that deterrence could (and would) work against conventional and nuclear aggression from the Warsaw Pact, but they never accepted the notion that deterrence was existential or automatic. Rather, they believed that deterrence was "delicate," and therefore successful deterrence strategies required constant attention, evaluation, and, when necessary, adjustment. In the U.S., every president was concerned about the robustness of deterrence, and consequently every successive administration tweaked nuclear doctrine (both declaratory and operational) in an effort to bolster deterrence in light of shifting balances of conventional and nuclear forces. In

The "MAD" myth confuses the strategic condition of "mutually assured destruction" and the force sizing criteria of "Assured Destruction" with operational nuclear doctrine. MAD refers to a particular strategic condition in which both superpowers came to live; it meant that neither side can successfully launch a nuclear first-strike intended to completely eliminate an adversary's retaliatory capabilities. In a MAD world, an allout nuclear attack would be an act of suicide because no matter what happened the other side would still have enough nuclear forces left over to launch a devastating retaliation. In the U.S., the number of weapons required for this was called "Assured Destruction." This required that the U.S., after absorbing a massive Soviet first-strike, would have enough nuclear weapons left to destroy 50% of Soviet industry and 25-30% of the population.

A focus on MAD and Assured Destruction gives the impression that deterrence and operational nuclear doctrine were based principally on the threat of launching a massive countervalue nuclear strike against the Soviet Union and other Warsaw Pact states. Such a view, however, is misplaced. MAD referred to a strategic condition, and the Assured

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<sup>&</sup>lt;sup>9</sup> On the "delicate" nature of deterrence, see Albert Wohlstetter, "The Delicate Balance of Terror," *Foreign Affairs* (January 1959): 211-234.

<sup>&</sup>lt;sup>10</sup> See, for example, Philip Bobbitt, Democracy and Deterrence: The History and Future of Nuclear Strategy (New York: St. Martin's Press, 1988); and Lawrence Freedman, The Evolution of Nuclear Strategy (New York: St. Martin's Press, 1981).

Destruction criterion was developed for use as a metric for force sizing and procurement.<sup>11</sup> They did not reflect how nuclear weapons might actually be used in most realistic nuclear war scenarios.

Beginning with the transition from "massive retaliation" under President Eisenhower to a doctrine of "flexible response" in the Kennedy administration, nuclear strategy was principally concerned with developing increasingly flexible, limited, and discriminate nuclear options aimed at counterforce and counter-military, rather than countervalue, targets. From the 1960s onward, the objective of nuclear doctrine was to create a wide range of nuclear (and conventional) response options across the entire spectrum of conflict, ranging from small-scale conventional conflicts (which would be met with a conventional response), all the way up to strategic nuclear war. Political and military officials believed that fine-tuned, proportionate, and variable response options would enhance the credibility of deterrence by providing U.S. and NATO officials with rational response options for every conceivable provocation.<sup>12</sup>

As the preceding discussion illustrates, deterrence in the Cold War was a dynamic process that was under constant attention and adjustment by political and military leaders. There was no "golden past" when deterrence was believed to be simple or easy to achieve, nor was there a period after the 1950s when operational nuclear doctrine was based on a

<sup>&</sup>lt;sup>11</sup> See, for example, Jervis, *The Meaning of the Nuclear Revolution*, ch.3; Fred Kaplan, *The Wizards of Armageddon* (Stanford: Stanford University Press, 1983), 317-318; Alain C. Enthoven and K. Wayne Smith, *How Much is Enough? Shaping the Defense Program, 1961-1969* (New York: Harper Colophon Books, 1971), 172-178; and Charles L. Glaser, *Analyzing Strategic Nuclear Policy* (Princeton: Princeton University Press, 1990), 4. McGeorge Bundy referred to Assured Destruction as a "measuring stick." See Bundy, "Strategic Deterrence Thirty Years Later: What has Changed?" in Christoph Bertram, ed., *The Future of Strategic Deterrence* (Hamden: Archon Books, 1981), 8.

<sup>&</sup>lt;sup>12</sup> On the importance of flexibility in U.S. nuclear strategy, see, for example, Edward Rhodes, *Power and MADness: The Logic of Nuclear Coercion* (New York: Columbia University Press, 1989), ch. 1; Lynn Etheridge Davis, *Limited Nuclear Options: Deterrence and the New American Doctrine*, Adelphi Paper, No. 121 (London: International Institute for Strategic Studies, 1976); Desmond Ball, "The Development of the SIOP, 1961-1983," in Desmond Ball and Jeffery Richelson, eds., *Strategic Nuclear Targeting* (Ithaca: Cornell University Press, 1986), 70-73; Ball, *Déjà Vu: The Return to Counterforce in the Nixon Administration*, (Santa Monica: California Seminar on Arms Control and Foreign Policy, 1974), 30-31, 50; and Morgan, *Deterrence Now*, p. 18.

single massive, rigid plan that predominantly targeted countervalue assets in the Soviet Union and other Warsaw Pact nations. When these myths are stripped away, some of the most basic and fundamental issues of nuclear deterrence – how much confidence leaders have in deterrence and what kind of operational nuclear doctrine is necessary for credible deterrence – are essentially the same today as they were in the Cold War. Like the Cold War, today many analysts (with some exceptions) believe that deterrence can and will work against current and emerging nuclear threats from nations, but it will need frequent scrutiny and, when necessary, modification. And, like the Cold War, many argue that nuclear deterrence strategies must be based on an operational nuclear doctrine that is flexible and "tailored" to bolster the credibility of deterrent threats against specific adversaries.<sup>13</sup>

# Deterrence in the Modern Strategic Environment: The Balances of Power and Resolve

Although there are similarities between some of the fundamental dilemmas and debates about deterrence in the Cold War and today, the strategic context in which deterrence will be used is different. In this new international environment that has emerged since the demise of the Soviet Union, the application of deterrence strategies and operations can pose new dilemmas and lead to logical conclusions and outcomes different from those in the past. In a different strategic context, the way in which deterrence strategies and operations are used, and the outcomes that they produce, may create new – or, at least, more acute – challenges for effective deterrence.

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<sup>&</sup>lt;sup>13</sup> In recent debates on the efficacy and strategy of deterrence, Keith Payne and Colin Gray have been the most vocal advocates of the fact that policymakers cannot have complete confidence in deterrence, especially against rogue states, and that credible deterrence strategies should be based on a flexible and tailored nuclear doctrine including, in their view, highly accurate low-yield counterforce weapons and missile defense. See, for example, Keith B. Payne, "The Nuclear Posture Review: Setting the Record Straight," Washington Quarterly (Summer 2005): 135-151; Payne, The Fallacies of Cold War Deterrence and a New Direction (Lexington: University Press of Kentucky, 2001); Colin S. Gray, Maintaining Effective Deterrence (Carlisle: U.S. Army War College, Strategic Studies Institute, 2003); and Gray, The Second Nuclear Age (Boulder: Lynne Rienner, 1999). On "tailored" deterrence, see M. Elaine Bunn, Can Deterrence be Tailored? Strategic Forum No. 225, Institute for National Strategic Studies, National Defense University, January 2007.

In the current international environment, one of the most important issues for the purposes of deterrence is the interplay between military capabilities and political resolve. The interplay of capability and resolve, which together make up the core requirements of threat credibility, is a critical factor in the deterrence equation. 14 For deterrence to be credible, the adversary must believe that the defender has both the necessary military capabilities – in other words the proper weapons and concomitant C4I (command, control, computers, and intelligence) apparatus to physically carry out the attack – and the necessary political resolve to act on its threats and use force if deterrence fails. The credibility component of deterrence is often expressed in terms of the relative balances of capabilities and resolve between nuclear-armed adversaries. The credibility of deterrent threats can be examined by analyzing the relative balance of military power between adversaries, and determining which nation is more committed to the particular issue at stake, and is therefore more willing to accept greater risks – including a nuclear detonation on its soil - to pursue its interests.

In the Cold War context, the impact on deterrence of the relative balances of capabilities and resolve between NATO and the Warsaw Pact was one of the central preoccupations of military planners and political officials. Throughout the Cold War, NATO went to great lengths to signal (and demonstrate) to the Soviets that NATO possessed both sufficient military capabilities and political resolve to act on its deterrent threats. <sup>15</sup> In the case of nuclear strategy, the emphasis on flexible counterforce options was largely driven by the belief that a wide range of response options would bolster the credibility of deterrence – especially extended deterrence – by providing U.S. officials with options that they might be rationally willing to execute. <sup>16</sup>

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<sup>&</sup>lt;sup>14</sup> The classic statement on deterrence credibility is William Kaufman, "The Requirements of Deterrence," in William Kaufman, ed., *Military Policy and National Security* (Princeton: Princeton University Press, 1956). Kaufman also includes the necessity of clearly communicating the threat.

<sup>&</sup>lt;sup>15</sup> For analysis on some of these issues, see David N. Schwartz, *NATO's Nuclear Dilemmas* (Washington: The Brookings Institutions Press, 1983). For a theoretical examination, see Thomas Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966), ch. 2.

<sup>&</sup>lt;sup>16</sup> See the sources cited in note 11.

As during the Cold War, the balance of capabilities and resolve between NATO and future adversaries will likely impact the deterrence equation and create complex strategic dilemmas that will require innovative solutions. In the current international setting, the potential effectiveness and longevity of deterrence strategies is likely to be affected by the imbalance of collective military power, on one hand, and the possible imbalance of political resolve, on the other, between NATO and potential adversaries.

Today, the balance of capabilities favors NATO, since there is no rival state or alliance that can defeat NATO's collective military power. The disintegration of the Soviet Union and the dissolution of the Warsaw Pact put NATO in the unique position of being the strongest multi-nation military alliance in the international system. That NATO's collective military power – buttressed by American military dominance over any single state - is unchecked by any rival state or coalition represents an important feature of the current strategic environment. However, while the balance of power favors NATO, the balance of resolve may favor the adversary in certain situations. In the aftermath of the Cold War there are perhaps only a few critical security issues for NATO that might be worth risking a nuclear exchange. Absent a direct threat to core national security interests, however, NATO countries may be reticent to run great risks against a nucleararmed adversary over peripheral (i.e., non-vital) issues. A future adversary, by contrast, may care deeply about the particular issue at stake, and may therefore be more willing – or at least perceived to be more willing – to risk a nuclear conflict.<sup>17</sup> These fundamental asymmetries will likely have important strategic consequences for future deterrence scenarios.

## The Balance of Capabilities

In the current international security environment, the global balance of military power greatly favors NATO. Compared to the Cold War,

<sup>&</sup>lt;sup>17</sup> On the potential implications of an asymmetry resolve, and, more generally, on the importance of the relative balance of capabilities and resolve, see, for example, Dean Wilkening and Kenneth Watman, *Nuclear Deterrence in a Regional Context* (Santa Monica: Rand Corporation, 1995); and Robert Powell, "Nuclear Deterrence Theory, Nuclear Proliferation, and National Missile Defense," *International Security* (Spring 2003): 86-118.

the Alliance is in a far better position today to threaten (and inflict) costs on an adversary while at the same time minimizing the potential costs of an adversary's retaliation. 18 Yet, while this asymmetry of capabilities has significant benefits, a vast imbalance of power may also create dilemmas for successful deterrence that were not present, or were perhaps less severe, than during the Cold War. In particular, an asymmetry of capabilities could have important consequences for crisis stability. The most likely scenario in which nuclear weapons might be used is a severe crisis, rather than an unprovoked, "bolt-from-the-blue" attack. As a result, the "stability" of a crisis between nuclear-armed adversaries is an important factor in the potential (and likelihood) of nuclear escalation. A crisis is "stable" when neither side has an incentive to use nuclear weapons first. Conversely, an "unstable" crisis occurs when one or both sides believe that there is a military or political advantage to launching the first strike, such as eliminating or degrading the adversary's retaliatory capabilities or weakening the opponent's resolve to fight. 19 Because a crisis is the most likely pathway to nuclear war, and because the stability of a crisis can impact the possibility of nuclear war, crisis stability is a useful lens through which to analyze future deterrence strategies, especially in the context of NATO's military superiority.

NATO's military superiority could make a future crisis unstable, either because NATO officials come to believe that technologically advanced precision-guided weapons (both conventional and nuclear) make a disarming first-strike a possible and perhaps attractive option, or because a militarily inferior opponent fears that NATO might strike first (whether or not this view is actually correct), or both. It is important to note that an adversary's concerns about a NATO first-strike may not reflect what NATO officials are actually thinking or planning. In international politics, large concentrations of military power in a single state or alliance can be

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<sup>&</sup>lt;sup>18</sup> On this point in the U.S. context, see James H. Lebovic, *Deterring International Terrorism and Rogue States: U.S. National Security Policy after 9/11* (London: Routledge, 2007), pp. 7-8.

<sup>&</sup>lt;sup>19</sup> On crisis stability, see Schelling, *The Strategy of Conflict* (Cambridge: Harvard University Press, 1960), ch. 9; Schelling, *Arms and Influence*, ch. 6; Glenn Snyder, *Deterrence and Defense: Toward a Theory of National Security* (Princeton: Princeton University Press, 1961), 97-110; and Kurt Gottfried and Bruce G. Blair, eds., *Crisis Stability and Nuclear War* (New York: Oxford University Press, 1988).

enough to generate intense fears of attack regardless of any assessments of actual intent.<sup>20</sup> Thus, the simple fact that NATO's collective military power might vastly overshadow an opponent could be enough to generate fears of a first-strike, regardless of whether NATO is actually considering such an option. In any crisis the potential for misinformation, miscalculation, and accidents may already be high, and fears of a disarming first-strike could compound these challenges.

From the opponent's perspective, trepidations about a disarming first-strike could lead to crisis instability by creating preemption incentives, encouraging reliance on dangerous command, control, and communications procedures, and/or promoting attempts at nuclear signaling and brinksmanship. If the adversary becomes convinced that a first-strike is imminent and that this attack has a reasonably good chance of eliminating its retaliatory capabilities, it might be tempted to use nuclear weapons first because, if it waited too long, it might not get a second chance after a NATO strike. In this scenario, a "use-it-or-lose-it" mentality could create pressures for preemption. Concerns about survivability might prompt a leader to pre-delegate launch authority or adopt a "launch-on-warning" posture in order to increase the chances of successful retaliation in the event of an attempted NATO first-strike. Such decisions might compound uncertainties associated with already complex command, control, and communications procedures, thereby increasing the chances of accidental

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<sup>&</sup>lt;sup>20</sup> This view is one of the core principles of balance-of-power theory in the neo-realist paradigm in international relations. See Kenneth N. Waltz, *Theory of International Politics* (Boston: McGraw-Hill, 1979), ch. 6; and John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton and Co., 2001), pp. 3-54, 267-272. For a modified view, see Stephen M. Walt, *The Origins of Alliances* (Ithaca: Cornell University Press, 1987) pp. 5, 21-30.

<sup>&</sup>lt;sup>21</sup> For some historical analysis of the "use-it-or-lose-it" scenario, see Lyle J. Goldstein, *Preventive Attack and Weapons of Mass Destruction: A Comparative Historical Analysis* (Stanford: Stanford University Press, 2005). On balance, however, a scenario in which a state uses nuclear weapons first out of fear of losing the capability is probably the least likely potential outcome of crisis instability. There is little that an adversary could hope to gain from a preemptive nuclear attack against NATO interests, especially because NATO possesses overwhelming nuclear and conventional escalation dominance. Nevertheless, the "use-it-or-lose-it" logic cannot be completely discounted because it is certainly possible that a state could take actions that cut against the rational logic against preemption. Despite the compelling logic against nuclear preemption, NATO leaders should be aware that a state that believes it might completely lose its nuclear capabilities in a disarming first-strike would be in a precarious position, and might therefore make sub-optimal decisions in the heat of a crisis.

launch.<sup>22</sup> Finally, an opponent could take measures to increase the chances that some weapons will survive the attack such as dispersing forces, erecting TELs (transporter erector launchers), and increasing alert levels. From the opponent's perspective these moves would help signal resolve and bolster deterrence by supposedly decreasing NATO's confidence in a successful disarming first-strike. In the heat of an intense crisis, however, NATO officials might see these developments as provocative and indicative of an impending preemptive strike, and subsequently preempt in the belief that a first-strike was necessary to prevent or limit the effects of an impending attack.<sup>23</sup>

While the preceding discussion highlights some of the potential dangers of a vast imbalance of capabilities, it is also important to note that NATO's military superiority does, of course, bring several advantages to the deterrence equation. Most important, nuclear and conventional superiority gives NATO escalation dominance, meaning that NATO forces can fight and win (or, at least fare better than an adversary) at any level of conflict. Escalation dominance can greatly contribute to deterrence by virtually eliminating any rational military incentive for an opponent to initiate a nuclear conflict. Escalation only makes good strategic sense if it is believed that victory (or some other military or political objective) can be achieved at a higher level of conflict. Because NATO has escalation dominance, an adversary has almost nothing to gain (and everything to lose) by escalation because it cannot defeat NATO at higher levels of violence.<sup>24</sup>

The advantages of escalation dominance, however, will largely depend on NATO decision-makers' willingness to accept risk. While adversary-initiated nuclear escalation is illogical from a strategic perspec-

<sup>&</sup>lt;sup>22</sup> See, for example, Lewis A. Dunn, "New Nuclear Threats to U.S. Security," in Robert D. Blackwill and Albert Carnesale, eds., *New Nuclear Nations: Consequences for U.S. Policy* (New York: Council on Foreign Relations Press, 1993); and Peter D. Feaver, "Command and Control in Emerging Nuclear Nations," *International Security* (Winter 1992-1993): 160-195. For an alternative view, see Jordan Seng, "Less is More: Command and Control Advantages of Minor Nuclear States," *Security Studies* (Summer 1997): 50-92.

<sup>&</sup>lt;sup>23</sup> See, for example, Robert Jervis, *Perception and Misperception in International Politics* (Princeton: Princeton University Press, 1976), ch. 3.

<sup>&</sup>lt;sup>24</sup> Wilkening and Watman, *Nuclear Deterrence in a Regional Context*, pp. x-xii, 6, 20-22, 40-42.

tive, the extent to which NATO can capitalize on the coercive benefits of escalation dominance will depend on how much NATO decision-makers are willing to gamble that the adversary understands the futility of escalation.<sup>25</sup> In other words, an adversary may make threats of nuclear escalation in a crisis, and even though the execution of these threats would be illogical because of NATO's ability to dominate the escalation ladder, NATO's options will be greatly affected by how confident decision-makers are that the adversary correctly understands the implications of escalation dominance. If NATO leaders believe that the opponent makes logical strategic calculations, they may conclude that its nuclear threats are a bluff and consequently take a strong stance in a crisis. If, on the other hand, they believe that the adversary has a different strategic calculus that does not lead to the same logical conclusions about escalation, or that a leader is willing to take unusual risks in a crisis, or that an accidental launch is possible in the heat of an intense crisis, NATO officials may not be willing to engage in brinksmanship under the assumption that escalation dominance provides NATO with significant deterrence advantages and bargaining leverage.

Political and military leaders should pay close attention to the potential consequences and implications of deterrent threats in an era of NATO military dominance. While military superiority certainly provides important benefits to deterrence, the threat of force can also lead to unintended consequences that may increase the chances of miscalculation and war. In this strategic environment, assurances may be as important as threats in the deterrence equation. Successful deterrence requires not only a credible signal of what one will do if an opponent does not comply, but also of what one will not do if it does. According to Thomas Schelling, "any coercive threat requires corresponding assurances; the object is to give somebody a choice. To say 'One more step and I shoot,' can be a deterrent threat only if accompanied by the implicit assurance, 'And if you

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<sup>&</sup>lt;sup>25</sup> Ibid., p. 55; and Daniel Byman and Matthew Waxman, *The Dynamics of Coercion: American Foreign Policy and the Limits of Military Might* (Cambridge: Cambridge University Press, 2002), p. 213.

<sup>&</sup>lt;sup>26</sup> On the importance of assurance and reassurance, see Schelling, *Arms and Influence*, pp. 74-75; Janice Gross Stein, "Reassurance in International Conflict Management," *Political Science Quarterly* (Autumn 1991): 431-451; and Litwak, "Nonproliferation and the Dilemmas of Regime Change."

stop I won't."<sup>27</sup> Assurances may be especially important in the current imbalance of military power because NATO's overwhelming capabilities could lead adversaries to believe that they might be attacked no matter what they do, and therefore conclude that they have little incentive for restraint. In this context, the objective of assurances is to convince an opponent that NATO will withhold force if the regime complies with certain demands. Thus, successful deterrence may depend equally on NATO's ability to credibly communicate willingness for restraint as well as readiness for action.

#### The Balance of Resolve

The other side of the credibility equation is the balance of resolve. In general, a state that has significant interests in the particular issue at stake is likely to have a high degree of resolve in a crisis, since a state that places major value on an issue is likely to be willing to go to great lengths to pursue its interests. As a result, the state that cares more about the issue may be willing to take significant risks in a crisis to achieve its objectives.

Throughout the Cold War, the issue of resolve had an important influence on the evolution of NATO's deterrence strategy. Political and military officials went to great lengths to signal to the Soviets that NATO could (capability) and would (resolve) act on its threats if attacked. The objective was to signal that NATO cared deeply about the defense of Western Europe, and was willing to risk war to defend its interests — though NATO would prefer to avoid war and settle differences peacefully. Among the many mechanisms used to signal resolve, NATO organized multinational conventional force deployments, particularly along West Germany's borders with East Germany and Czechoslovakia, deployed theater nuclear weapons on the continent, and developed a wide range of flexible and proportionate conventional and nuclear response options that might be rational to execute even in the face of the Soviet Union's retaliatory capabilities.

<sup>&</sup>lt;sup>27</sup> Schelling, Arms and Influence, p. 74.

<sup>&</sup>lt;sup>28</sup> See David S. Yost, "NATO and the Anticipatory Use of Force," *International Affairs* (January 2007), pp. 48-49.

In the aftermath of the Cold War, NATO's ability to signal resolve may be more difficult. Many of the mechanisms described above that were used to signal NATO's resolve during the Cold War are no longer present. NATO's conventional force presence in Europe has declined substantially, and the U.S. nuclear stockpile in Europe, which included over 7,000 warheads at its peak, reportedly now totals roughly 150 to 240 warheads.<sup>29</sup> Equally important, NATO officials have not as clearly defined and articulated the Alliance's strategic interests as they did during the Cold War. Deterrence is most likely to succeed when the defender defines its interests and communicates clear and steadfast "red lines" that must not be crossed. During the Cold War U.S. and NATO leaders frequently articulated the crucial importance of the safety and security of the Alliance, and constantly reiterated that all NATO countries were firmly committed to defending any other member nation under conventional or nuclear attack. During that time, it was understood that there was a real threat to Western security, and that a Soviet attack on one or a few NATO countries posed a significant challenge to the security of other members of the Alliance. Consequently, there was little doubt – although not complete certainty – that NATO countries would consider an attack on one member nation as an attack on all.<sup>30</sup>

Since the collapse of the Soviet Union, NATO's strategic interests are less clear. The lack of well-defined interests is due in large part to the absence of the kind of global existential threat that the Soviet Union posed throughout the Cold War. In future nuclear challenges, NATO's ability to demonstrate credible resolve for deterrence may be complicated by differing beliefs among Alliance members as to the location, severity, and timing of the threat. Disagreements within NATO over where the

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<sup>&</sup>lt;sup>29</sup> Unofficial information on U.S. nuclear weapons in Europe, including the recent withdrawal of U.S. nuclear weapons from the UK, is available at http://www.fas.org/blog/ssp/2008/06/us-nuclear-weapons-withdrawn-from-the-united-kingdom.php#more-259.

<sup>&</sup>lt;sup>30</sup> There were, however, some concerns among the European allies about the extent to which the United States believed that a Soviet attack in Europe was a direct threat to U.S. security. These concerns led to endless debates about how to ensure that the U.S. would indeed come to the aid of Europe if the Soviets attacked. An important part of these debates concerned the "coupling" of U.S. theater nuclear weapons to American strategic forces based in the United States. For some of these debates, see Schwarz, *NATO's Nuclear Dilemmas*; and Earl C. Ravenal, "Counterforce and Alliance: The Ultimate Connection," *International Security* (Spring 1982): 26-43.

threat is (from which countries), how intense or severe it is, and if or when it should be dealt with will impact the Alliance's ability to demonstrate resolve and capitalize on its collective strength to deter future adversaries. To be sure, there were many disagreements and intense debates within NATO throughout the Cold War, but these disputes were ultimately tempered by the existence of the Soviet threat.<sup>31</sup> It is possible that a future nuclear-armed adversary with only local or regional (as opposed to global) aspirations could have doubts about NATO's willingness to act together in the common defense, especially if the nuclear threat only pertained to one or a handful of member nations or if the threat was directed at a non-NATO country.

From the perspective of the balance of resolve, the pertinent issue in today's international security environment is that future nuclear-armed adversaries may care more about certain issues than NATO, and may therefore be more willing (or perceived to be more willing) to take and accept risks in pursuit of their objectives. Unlike during the Cold War, most current and potential adversaries do not have the nuclear capabilities necessary to completely destroy NATO countries. In a future crisis, however, the vast destructive power of even a few nuclear weapons, coupled with relatively low interests at stake for NATO, could limit NATO's options or tempt leaders to avoid a crisis altogether.<sup>32</sup> Moreover, if an adversary believes

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<sup>&</sup>lt;sup>31</sup> For historical examinations of some of the issues, disagreements, and debates within NATO utilizing new archival resources, see, for example, Marc Trachtenberg, *A Constructed Peace: The Making of the European Settlement, 1945-1963* (Princeton: Princeton University Press, 1999); Erin Mahan, *Kennedy, De Gaulle, and Western Europe* (Houndmills: Palgrave Macmillan, 2002); Thomas A. Schwartz, *Lyndon Johnson and Europe: In the Shadow of Vietnam* (Cambridge: Harvard University Press, 2003); and Francis J. Gavin, *Gold, Dollars, and Power: The Politics of International Monetary Relations, 1958-1971* (Chapel Hill: UNC Press, 2004).

<sup>&</sup>lt;sup>32</sup> Although there has been little written on these issues in the NATO context, there is a growing literature discussing U.S. resolve in a crisis with a regional nuclear adversary. See, for example, Derek D. Smith, *Deterring America: Rogue States and the Proliferation of Weapons of Mass Destruction* (Cambridge: Cambridge University Press, 2006); Byman and Waxman, *The Dynamics of Coercion*; Richard K. Betts, "What Will it Take to Deter the United States?" *Parameters* (Winter 1995): 70-79; Charles L. Glaser and Steve Fetter, "National Missile Defense and the Future of U.S. Nuclear Weapons Policy," *International Security* (Summer 2001): 40-92; Barry R. Posen, "U.S. Security Policy in a Nuclear Armed World (Or: What if Iraq had Nuclear Weapons?), *Security Studies* (Summer 1997):1-31; and Powell, "Nuclear Deterrence Theory, Nuclear Proliferation, and National Missile Defense."

that NATO is highly sensitive to casualties, NATO threats may ring hollow.<sup>33</sup> In the end, if the issue in contention is a core interest for the adversary but a non-vital interest for NATO, the opponent will likely be willing to accept greater risks and push harder in a crisis.<sup>34</sup>

Since resolve is a crucial element of deterrence, NATO's deterrence strategies should be coordinated and executed carefully. NATO's experience with deterrence in the Cold War should be instructive: during that time, the Alliance worked hard to signal its resolve, most notably by concentrating forces along the inner-German border and elsewhere in Europe and by repeated statements from political and military leaders indicating that the safety and security of Europe were intimately connected to NATO's long-term security interests. In the future, the chances of successful deterrence will increase if NATO can more clearly define and articulate its interests. By expressing commitment through actions and rhetoric, NATO can more easily signal that there are deterrence "red lines" that should not be crossed. This will not be an easy task, especially because there may be disagreements among the Allies over what the "red lines" should be. But deterrence is more likely to succeed if NATO's security interests - and therefore resolve - are defined and communicated in advance, rather than when an adversary is just about to cross the line. If NATO is serious about deterrence, it should have the necessary debates about its security interests and take the necessary steps to communicate those interests before an adversary seriously considers aggression.

Similarly, because resolve is so important for deterrence, NATO should work to keep debates and disagreements within the Alliance about potential threats out of the public eye. Compared to previous eras, there is an increasing tendency for nations to voice their disagreements in the global arena, either directly or by leaking stories to the press. Such disclosures are more quickly disseminated around the world due to advances in

33 Byman and Waxman, The Dynamics of Coercion, pp. 130-151, 213-214.

<sup>&</sup>lt;sup>34</sup>See, for example, Powell, "Nuclear Deterrence Theory, Nuclear Proliferation, and National Missile Defense," pp. 89-93, 100-103.

global communications such as the Internet, 24-hour news stations, and the digital revolution. The public airing of grievances or disputes within the Alliance could have a detrimental effect on deterrence. In an alliance as big and diverse as NATO, signaling political resolve is largely dependent on its ability to "speak" with one voice. Public knowledge of any serious differences of opinion among Alliance members could severely weaken an adversary's perception of NATO's resolve, and consequently diminish the strength, robustness, and longevity of deterrence. For the sake of resolve and credibility, political and military officials should pay careful attention to crafting and managing NATO's "public voice." A global perception of NATO's unified and steadfast resolve to defend specific interests, even if not entirely accurate, could greatly increase the chances of successful deterrence.

### Conclusion

Despite dramatic changes in the international environment since the end of the Cold War, there is little evidence to suggest that the principal concepts and logic of deterrence have changed, or that they are irrelevant to current and future nuclear deterrence challenges. However, the longevity of these concepts does not mean that intellectual inquiry should stop. There is still much work to be done on deterrence, including the continual testing of many of the core deterrence concepts – most of which were derived through logical deduction – through qualitative and quantitative analysis.<sup>35</sup> In addition, other threats to NATO security and international stability such as WMD terrorism require innovative thinking and fresh research to determine if and how they can be deterred. Although the study of nuclear weapons and deterrence has atrophied since the demise of the Soviet nuclear threat, as long as nuclear weapons exist there will need to

<sup>&</sup>lt;sup>35</sup> The testing of deterrence concepts is what Robert Jervis calls the "third wave" of deterrence research. See Jervis, "Deterrence Theory Revisited," *World Politics* (January 1979): 289-324. Examples of this kind of research include Paul Huth and Bruce Russett, "What Makes Deterrence Work? Cases from 1900 to 1980," *World Politics* (July 1984): 496-526; Huth, *Extended Deterrence and the Prevention of War* (New Haven: Yale University Press, 1991); Vesna Danilovic, *When the Stakes are High: Deterrence and Conflict Among Major Powers* (Ann Arbor: University of Michigan Press, 2002); Alexander L. George and Richard Smoke, *Deterrence in American Foreign Policy: Theory and Practice* (New York: Columbia University Press, 1974).

be continued research and analysis on deterrence to help prevent a catastrophe. As new threats develop, earlier concepts of deterrence, and the lessons and insights gained from past experiences, can provide useful guidelines for dealing with emerging security challenges.

# HOW TO LINK DETERRENCE THEORY TO STRATEGIC PLANNING

## Jean BÉTERMIER\*

Because NATO is a defensive alliance, its strategy fundamentally works in a denial mode which, during the Cold War, was strongly underpinned by nuclear deterrence. For decades, the words "deterrence" and "nuclear" scarcely went one without the other. What is the remaining value of nuclear deterrence in the new geopolitical environment? What role would be appropriate for conventional deterrence? How can NATO adapt its strategy and address the challenge of planning when there is no clearly identified enemy?

The geopolitical environment has completely changed, and we need to rethink our strategy. Indeed, the formidable but well-defined threat exerted by the Soviet Union has disappeared, while we are developing friendly and strong economic relations with China. But not all dangers have faded, and we are now confronted by a fragmented, unstable, and hard to predict international environment.

As we move into the 21st century, dangers stem more and more from extremist regimes that aspire to acquire nuclear, biological and chemical weapons and the means to deliver them. Even a ballistic missile equipped with a conventional warhead could, in some cases, be considered a weapon of mass destruction— for instance, if it could be used to strike a chemical factory or a nuclear installation. Moreover, aggressive regimes often harbor or control terrorist networks. Weak and failing states could present the same array of threats, but with the added problem that their

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governments are unable to control their territory and population or to respect their international commitments. In this new and increasingly complex environment, deterrence has to be adapted to different specific situations. How can one deter rogue state leaders who often seem irrational and whose provocations look like invitations to strike them? What do they value most, their prestige or the survival of their regimes, as seems to be the case with North Korea and Iran? How can one tackle the threat of terrorist organizations which do not have territories of their own to hold at risk? Do these new actors believe that Western powers could use nuclear weapons against them when consensus on nuclear deterrence is continuously eroding in the United States and in several European countries?

During the Cold War, US nuclear planning policy was to hold at risk the potential aggressor's nuclear arsenal, military forces, leadership and industrial infrastructure. France, which had a limited nuclear arsenal and rejected the idea of another war in Europe, adopted an "anti-cities" strategy of deterrence.

The world has changed, and we have to reconsider the relevance of the strategic theories elaborated during the Cold War. The United States, for instance, is moving from what could be described as the "one size fits all" concept of the Cold War to deterrence tailored to face distinctly different potential adversaries. Viable options to deter new adversaries need to be acceptable to the American public. The Quadrennial Defense Review has included the concept of "tailored deterrence" involving various types of capabilities, including conventional forces, in US policy. Indeed, advances in the effectiveness of conventional weapons could make it possible to use them to perform some of the missions that until recently were assigned to nuclear weapons. It is clear that in many cases the threat to use conventional weapons could be more credible than the threat to employ nuclear weapons, but would it suffice to deter the adversary from undertaking hostile action? Conventional weapons may not have the psychological

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<sup>&</sup>lt;sup>1</sup> Quadrennial Defense Review Report (Washington, DC: U.S. Department of Defense, 6 February 2006), pp. vi, 4.

deterrence impact that nuclear weapons have, because nuclear arms are unlike all other weapons in their physical and psychological effects.

The Atlantic Alliance's Strategic Concept of 1999 states that a mix of nuclear and conventional forces remains essential and that "the supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States." However, in the current international environment, the common view inside NATO is that the circumstances in which it might have to contemplate any use of nuclear weapons are extremely remote, and there is a growing consensus on a principle of causing minimum damage and achieving success through the paralysis of the adversary. The future NATO Strategic Concept, which should be elaborated before 2012, will have to take a position on the continuing relevance of US nuclear weapons deployed in Europe to arm NATO aircraft.

France has long had its own nuclear deterrence policy and it is pertinent to consider where it stands. France has always opted for a «non-use» nuclear policy, and has rejected the very idea of participating in a nuclear battle. This is why, in the 1960s, it opposed the concept of "flexible response" and distanced itself from the integrated military structure of NATO. While there was for some years in Paris a distinction drawn in the roles of different nuclear weapons, with some of them called "pre-strategic", all French nuclear weapons have been considered as strategic in nature since the early 1990s.

On the occasion of the presentation of the new French SSBN — - Le Terrible — in March 2008, French President Nicolas Sarkozy gave his own views on the role of France's nuclear strategy. After reaffirming that "it is strictly defensive and protects us from any aggression against our vital interests emanating from a state", he gave some indications about the possible targets. "All those who would threaten our vital interests would expose themselves to severe retaliation by France resulting in

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<sup>&</sup>lt;sup>2</sup> North Atlantic Council, Strategic Concept, 24 April 1999, paragraph 62.

damage unacceptable to them, out of proportion with their objectives. Their centers of political, economic and military power would be targeted on a priority basis."<sup>3</sup>

President Sarkozy's declaration was consistent with those of his predecessor, Jacques Chirac, who, addressing in 2001 and 2006 the threats that regional powers armed with weapons of mass destruction could pose, had referred to the same possible targets. Moreover, Jacques Chirac introduced the idea that unacceptable damage did not mean the total annihilation of a country: "In this case the choice would not be between the total annihilation of a country and doing nothing."<sup>4</sup>

However, while there is no place for a prolonged nuclear campaign in French strategy, President Sarkozy holds that, in the case of an adversary who might miscalculate the scope of France's vital interests, France might choose to send a nuclear warning that would underscore its resolve. Such a warning would be aimed at reestablishing deterrence.

Even though France regards its long range cruise missiles as strategic weapons, it considers them more as crisis management assets than as deterrence weapons.

In the meantime, Russia, which could not maintain and modernize the formidable conventional arsenal that it inherited from the Soviet Union, is relying more than in the past on nuclear weapons. It has since 1993 retained the possibility of "nuclear first use", a concept that the USSR had renounced during the Cold War when it had conventional military superiority.

Deterrence must be linked with policy. In a global world of shared interests within complex international networks, the Western

<sup>&</sup>lt;sup>3</sup> Nicolas Sarkozy, "Discours de M. le Président de la République," Cherbourg, 21 March 2008, available at http://www.elysee.fr.

<sup>&</sup>lt;sup>4</sup> Jacques Chirac, speech at the Institut des Hautes Études de Défense Nationale, 8 June 2001, available at http://www.elysee.fr.

nations are reconsidering the use of military force; and that cannot be without consequences, particularly for nuclear weapons. Indeed, we can observe in the Balkans, Iraq, and Afghanistan, the limits of military forces when they are engaged alone to solve the current conflicts. We need to return to the idea of a "Grand Strategy" combining all the capabilities of the State — diplomacy, practical cooperation, economic measures, and military forces. Several U.S research institutions have launched initiatives such as Smart Power (Center for Strategic and International Studies) and Integrated Power (Center for American Progress), while Europeans have expressed a preference for "soft power". However, one of the lessons of history is that the implementation of a "Grand Strategy" is a challenging task, one rarely achieved at the national level, and almost impossible to attain inside an alliance. A high level Middle Eastern politician recently said that he could not rely on a guarantee by NATO's 26 members because he sees its decision-making process as being as uncertain as that inside the Arab League!

It should be no wonder that, in this general ambiance, the "raisons d'être" of nuclear weapons are now questioned by high level strategists. One nonetheless did not expect to see Henry Kissinger, George Schultz, William Perry and Sam Nunn calling for a world without nuclear weapons.<sup>5</sup> In mid-2008 the US Congress eliminated the Administration's request for \$10 million to study the Reliable Replacement Warhead, which would permit the replacement of current weapons without nuclear testing.<sup>6</sup>

In the history of denial strategies none has been as effective as nuclear deterrence. Much has been said about the limits of nuclear weapons and their potential relevance to deterring new threats. But, as we still need hard power in a world in which weapons of mass destruction are

<sup>5</sup> George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, 4 January 2007; George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn, "Toward a Nuclear-Free World," *Wall Street Journal*, 15 January 2008.

<sup>&</sup>lt;sup>6</sup> Jonathan Medalia, *The Reliable Replacement Warhead Program: Background and Current Developments*, RL32929 (Washington, DC: Congressional Research Service, 23 July 2008), pp. 44-45.

proliferating, our first challenge is to maintain the credibility of our deterrence posture, from strategy to planning if possible, short of engagement in an operational campaign.

More than any other form of denial strategy, because of its horrifying content, the success of nuclear strategy depends on its credibility: the credibility of the decision-maker; the credibility of a nuclear threat appropriate to the interests at stake; and the credibility of weapons and delivery systems with demonstrated performances. Because nuclear weapons are intended to be non-usable weapons, owner states have taken great care to let all concerned know the main characteristics of their strategic systems. During the Cold War, announcements of successful nuclear and missile tests were considered contributions to the credibility of the nuclear deterrent. Iran has not hesitated to display its new Shahab 3 medium range ballistic missile in its military parades, and Russia has done likewise with its new systems. However, in contrast with the various declarations of nuclear strategy during the Cold War, including the US doctrine of "Mutual Assured Destruction" and the French "anti-cities" policy, the established nuclear powers have become less vocal about their nuclear doctrines and capabilities. Most of the NPT-recognized nuclear powers officially announced the detargeting of their nuclear forces in the 1990s, and they were joined by China in 2000.<sup>7</sup>

At the same time, as a paradox when we speak of adapted or tailored deterrence, we can only observe that the US, the UK and France, in reducing the size of their nuclear arsenals, have eradicated a large variety of nuclear systems that could have offered much more flexibility in terms of making the threat visible and demonstrating their will through forward deployment.

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<sup>&</sup>lt;sup>7</sup> On 26 September 1997 President Jacques Chirac announced that, given the dismantlement of the IRBMs on the Plateau d'Albion, "none of the nuclear means of the French deterrent force is henceforth targeted." This brought French declaratory policy into line with that adopted by Russia, the United Kingdom, and the United States in 1994. On 1 May 2000, at the NPT Review Conference, China, France, Russia, the United Kingdom, and the United States made the following statement: "Emphasising the essential importance of cooperation, demonstrating and advancing mutual trust among ourselves, and promoting greater international security and stability, we declare that none of our nuclear weapons are targeted at any State."

The role that Ballistic Missile Defense (BMD) could play in support of deterrence and its impact on planning deserves attention. Future foes could be less rational than the Soviet leaders were, and they may have before long a large number of WMD. The time when some analysts held that BMD would undermine the credibility of nuclear deterrence is over; these analysts argued that BMD could be seen by the adversary as a lack of resolve on our side to have recourse to nuclear weapons if need be. Absent a minimum BMD level of protecting our territory and our forces, an aggressor could be tempted to use biological or chemical weapons. Knowing that we do not have such weapons, he could doubt our resolve to retaliate with nuclear weapons; he also might threaten us with a nuclear strike if we pursued a military action against his interests. The 1991 campaign against Iraq demonstrated how a limited Missile Defense well coordinated with deterrence saved the policy of the coalition. Indeed, without some BMD opposing the Iraqi Scuds, the Israeli government would have had to retaliate against Iraq; such a move would have broken the US-led coalition. At the same time the risk of Israeli retaliation deterred Iraq from equipping its Scuds with chemical weapons. From this lesson, let us consider a scenario in which the aggressor has some nuclear-armed ballistic missiles with the range to reach the territory of several members of the coalition not protected by BMD. How would public opinion in these countries react? How would their governments maintain room for maneuver?

Nuclear deterrence will not work against the radical extremist core of terrorist networks, because they have no territory to hold at risk. However, it is relevant to consider other types of possible adversaries and the difficulties of establishing effective deterrence arrangements. Such a task can hardly be undertaken, particularly in the nuclear domain, without political instructions and guidelines. It is noteworthy that nuclear strike plans have always been protected by a high level of secrecy. Each side has to calculate the level of destruction that it could inflict on the other and the risks involved in a confrontation. Western nuclear powers, as well as Russia, have retained the option of "a nuclear first use".

The first step in planning is to specify the weapons we need.

Development of a new nuclear weapon could take several years and the trend in the West is not in favor of new weapons. However, improvements in accuracy offer more flexibility because significant results can be obtained with lower nuclear yields while limiting collateral damage.

When it comes to operational planning the following situations deserve careful attention.

Deterrence of a state armed with nuclear weapons

Absent a highly reliable Missile Defense, it is doubtful that deterrence can be accomplished without nuclear weapons. Retaliatory strike plans for deterrence could differ depending, among other factors, on the size, reach and vulnerability of the adversary's nuclear arsenal and the effectiveness of our BMD. Retaliatory strike plans should exclude attacks on government and command and control installations as long as we are unsure about who could have their fingers on the nuclear trigger. In the longer term, further reductions by the five NPT-recognized powers in their nuclear arsenals could well lead to a return to anti-cities strategies.

Deterrence of a state armed with chemical and biological weapons and pursuing nuclear weapons

Conventional weapons could in many cases be sufficient for deterrence, and, in the event of deterrence failure, suitable for strike operations. However, even if the continuing improvements in conventional weapons might diminish the need to threaten recourse to nuclear weapons, the latter could remain a tool of choice to threaten hardened and deeply buried targets or nuclear, biological or chemical installations or stockpiles. Indeed, the formidable heat they produce could limit further damage that could follow from dangerous by-products escaping from these targets. Nuclear installations contributing to proliferation could be priority targets in some circumstances. However, it is clear that once mobile WMD missile launchers are dispersed, precision-guided conventional munitions will be the weapons of choice.

#### Deterrence in war

The threat of a nuclear response in case of a WMD attack could

limit the risk of an adversary undertaking this kind of aggression. In 1991, it was probably the threat of nuclear retaliation that prevented Saddam Hussein from using biological and chemical weapons against Israel and the forces of the coalition. Missile defense of NATO forces in the theater is mandatory. Missile defense of NATO populations and territories would contribute to the political freedom of Alliance governments.

### Preemption

The jury is still out concerning the role of "preemption" in deterrence. We have to keep in mind that recently five NATO member states' former Chiefs of Defence Staff, working on the need for the West to define a grand strategy, concurred on the legitimacy of "first use" of nuclear weapons if, in case of an imminent danger, it could limit the overall damage. Interestingly, those views — although widely publicized — did not raise the controversy one might expect in the context of the current crisis with Iran. However, the poor intelligence estimate used to justify the invasion of Iraq in 2003 has weakened the appeal of preemption, particularly if it would have to be nuclear to be effective.

# Security guarantees to allies or neutrals

During the Cold War, the permanent deployment of US nuclear weapons on European soil was seen as the main coupling factor between the two sides of the Atlantic. Today such a guarantee could be given with less solemnity, but probably less credibility, with "offshore" assets. That could make it more acceptable to the protected states, particularly in the Middle East. But how could a security guarantor associate those states to the retaliatory strike plans formulated for purposes of deterrence with the necessary confidence and secrecy?

Indeed, the proliferation of nuclear, biological and chemical weapons reopens the debate. What are Turkey, Saudi Arabia, Egypt, and the United

<sup>&</sup>lt;sup>8</sup> General Klaus Naumann, General John Shalikashvili, Field Marshal The Lord Inge, Admiral Jacques Lanxade, and General Henk van den Breemen, *Towards a Grand Strategy in an Uncertain World: Renewing Transatlantic Partnership* (Lunteren, The Netherlands: Noaber Foundation, 2007), pp. 94, 96-97.

Arab Emirates going to do if Iran gets nuclear weapons? What steps may Japan take regarding North Korea? Security guarantees, including nuclear commitments if needed, could be the only way to limit the development of new nuclear actors. But who could offer such guarantees? The US, the UK, and France, acting separately or together, or NATO as a collective defense body but with all the uncertainties already mentioned? What kind of cooperation with Russia might be developed in support of extended deterrence?

Considering that currently it seems difficult, if not impossible, to proceed to the nuclear planning needed to deter several states that are or could be a matter of concern, we could adopt the following guidelines.

- Deterrence should be underpinned by a thorough analysis of the character of each possible adversary as well as of the weaknesses of the state he governs: "Know the enemy" remains the golden rule.
- Intelligence and analysis sharing inside the NATO alliance is of the utmost importance.

Given the diversity of possible adversaries in regions that we are not familiar with, we should pay special attention to situational awareness. It should include not only a thorough analysis of the possible targets, but also a close survey of air and missile defenses and a deep knowledge of the meteorological conditions, particularly the prevailing winds.

- Organizations, chains of command, and control networks should be flexible enough to be able to react rapidly, particularly if the operational plans combine conventional with nuclear weapons.
- Annihilation of the adversary is no longer the central paradigm. The
  damage threatened for purposes of deterrence should be unacceptable
  to the foe, but limited enough to be accepted by public opinion, as well
  as by neutral and friendly countries in the vicinity.
- In some cases properly targeted conventional munitions may function as more appropriate instruments of deterrence because they are more usable. Their threat or use could contribute to deterrence and/or conflict management as long as the adversary does not doubt our deter-

mination and readiness to have recourse to nuclear weapons if and when necessary. A policy which lets the adversary think that conventional weapons will always be the first step in escalation could undermine deterrence and drive us to the use of nuclear weapons that we want to avoid.

- We have to think about "the day after" and the consequences for the region at large, including human casualties, damage to the local economies, and harmful effects on the environment. Some kinds of attacks, such as the electromagnetic pulse generated by high altitude nuclear bursts, which look attractive owing to the low level of human casualties they would cause, could be deemed unacceptable given the lasting destruction they might inflict on the economies of neighboring countries.
- Training still matters, particularly for nuclear forces, if we want to maintain their credibility. The professional military standing of nuclear staffs and crews should remain high and visible.

#### Conclusion

As we reassess our nuclear deterrence policy and planning we must align them with our other military capabilities, allowing our political authorities to define solutions involving the use of force among the other components of a grand strategy.

Moreover, we should establish an adapted dialogue policy with each state that we intend to dissuade or deter. This policy should demonstrate our determination while maintaining some ambiguity about our plans.

Because we are engaged in a policy of nonproliferation, we should not overstate the power of nuclear weapons. However, we should avoid diluting their unique deterrence capabilities as we improve the other tools of a denial strategy.

# NATO, NUCLEAR DETERRENCE, AND PUBLIC DIPLOMACY: FACTORS SHAPING A NEW STRATEGIC CONCEPT

# Michael RÜHLE\*

### Introduction

In April 2009, at NATO's 60th anniversary Summit, the Heads of State and Government of the Alliance are likely to task the North Atlantic Council to draft a new Strategic Concept. Replacing the 1999 document, this new Strategic Concept would probably be published at the subsequent Summit, possibly in 2010.

Although NATO's increasingly operational nature severely limits the importance of what a Strategic Concept can achieve, there are good reasons for such an exercise. One reason is that NATO's current Strategic Concept dates back to 1999. Although it has proven remarkably prescient, and thus has aged quite gracefully, it pre-dates the most seminal events of today's security environment, such as "9/11", and the conflicts in Afghanistan and Iraq. The Comprehensive Political Guidance (CPG) agreed in 2006 tried to draw some conclusions from this new strategic environment and, to a degree, may be seen as an update of the 1999 document. However, as the purpose of the CPG is to provide guidance for the various defence planning disciplines within NATO, it remains essentially an internal document.

Another reason for launching a discussion on a new Strategic Concept at the April 2009 summit is the US election cycle. Starting work

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on a new major document in 2009 should help to focus a new US Administration on NATO early on in its tenure. With so many issues competing for Washington's attention, engaging the United States in an important drafting exercise might be a convenient way for NATO – and for Europe – to secure a prominent place on the US agenda.

However, the key reason for reviewing the Alliance's Strategic Concept is a conceptual one. The burdens on NATO are greater today than ever before. NATO's tasks now include combat in Afghanistan, peacekeeping in the Balkans, anti-terrorist naval operations in the Mediterranean, providing support for the African Union, training Afghan and Iraqi security forces, and providing humanitarian relief after natural disasters. Some of these tasks run the risk of overtaxing NATO. Afghanistan, for example, has revealed considerable differences among the Allies with respect to threat perception, strategic culture, and political and constitutional constraints. In a similar vein, NATO Allies do not yet share a common view on how the Alliance should position itself vis-à-vis new threats, such as the proliferation of missiles and weapons of mass destruction, cyber attacks and the disruption of energy supplies. The Russian-Georgian conflict has raised questions not only with respect to NATO's relationship with an increasingly assertive Russia, but also with respect to the costs and benefits of a continuing NATO enlargement process, and to the balance between expeditionary missions abroad and collective defence at home.

NATO's partnership policies, which featured prominently in the 1999 Concept, have also broadened significantly since then; they have come to include several Gulf States as well as new ties with countries from the Asia-Pacific region. Largely due to the need for a more comprehensive approach to crisis management, NATO's links with other international institutions, notably the European Union and the United Nations, will have to be redefined as well. All this has led many observers to conclude that a new team-building exercise is required. Work on a new Strategic Concept is supposed to be the catalyst of a new transatlantic security consensus.

### The Nuclear Conundrum

It is widely assumed that a new NATO Strategic Concept will also feature new language on the role of nuclear weapons. The 1999 Concept took a conservative approach to this issue: the document took note of the positive changes after the end of the Cold War and stressed that they had paved the way for huge cuts in NATO's European-based nuclear forces. It also noted that the circumstances in which any use of nuclear weapons might have to be contemplated were now "extremely remote." With respect to the rationale for NATO's nuclear forces, however, the language was largely the same as that of the previous Strategic Concept from 1991.

The conservatism of the 1999 Strategic Concept on nuclear matters was not without reason. After all, statements on nuclear matters, like everything else in NATO, must be approved by all Allies (France constituting the occasional exception). Conservatism is thus an inherent feature, all the more so in areas that do not appear to require radical and/or imminent changes. Another factor that naturally tilts the balance in favour of conservatism is the multi-purpose nature of any NATO Strategic Concept: it not only seeks to explain NATO to a wider public, both inside and outside the NATO nations; it also provides strategic guidance for NATO's military authorities (who then work out more detailed follow-on documents); and, above all, it serves to provide a snapshot of an intra-Alliance consensus on the key elements of NATO's agenda. In other words, a Strategic Concept is as much about internal "housekeeping" as it is about public diplomacy. Thus, while public diplomacy requirements may suggest bold, far-reaching policy statements, the need for political consensus within an Alliance of 26 (soon 28) sovereign nations will eventually compel the Allies to settle for the lowest common denominator. This is all the more true for sensitive nuclear matters.

However, despite these structural constraints, the drafters of the next Strategic Concept might not get away quite so easily. The changes in the strategic environment since the publication of the 1999 Concept may

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<sup>&</sup>lt;sup>1</sup> North Atlantic Council, Strategic Concept, 24 April 1999, par. 64.

prove to be too fundamental to allow for a simple cut-and-paste job. In 1999, when NATO was still a "Eurocentric" organisation, its nuclear pronouncements were justifiably influenced by an improving security situation in Europe. Even if Russia's future course remains a cause for concern, a purely European focus of NATO's nuclear deterrent would appear far too limited. With NATO acting outside of its traditional European perimeter; with renewed concerns about nuclear proliferation (including in NATO's Middle Eastern neighbourhood); and with the non-proliferation regime under threat from various directions, a mere repetition of the 1999 language on nuclear issues would appear to fall short of current requirements. Moreover, as the new NATO Strategic Concept may be published in 2010, the year of the next Review Conference of the Nuclear Non-Proliferation Treaty (NPT), its language on nuclear matters, particularly on arms control, will be the subject of much public scrutiny. Finally, since the new Strategic Concept is likely to feature much new, forward-leaning language on many other parts of NATO's agenda, too conservative an approach on nuclear matters would make that part of the new Concept stand out as "retro", thereby inviting charges that the Allies were shying away from revisiting this part of their defence policy.

### The proliferation challenge

Drafting ambitious language for the nuclear part of a new Strategic Concept will not be easy. It is obvious that the document will have to make reference to the changes in the security environment since 1999. However, achieving a consensus view on what these developments are, and how NATO should respond to them, may prove to be rather difficult. The current nuclear debate is characterised by an uneasy co-existence of two radically different schools of thought, with some NATO Allies adhering to one and some to the other.

One school of thought argues that international developments point to a slow but irreversible trend towards further nuclear proliferation. While the number of blatant proliferation cases is currently limited to North Korea and Iran, the former may actively transfer nuclear technologies to others, while the latter's nuclear ambitions threaten to generate a "domino effect" in the Middle East. Equally worrisome is the rise of a semi-private market for weapons of mass destruction (witness the A. Q. Khan network), which indicates that WMD proliferation is now proceeding outside the classical inter-state regime. The rise of terrorist non-state actors, bent on inflicting mass casualties, has called into question traditional notions of deterrence and has added a sense of urgency to the search for new concepts, such as "tailored deterrence". The debate about a possible "Talibanisation" of Pakistan has raised the spectre of a nuclear-armed state dominated by fundamentalist religious believers.

Another factor is the global renaissance of nuclear energy. While it constitutes a logical response to climate change and the scarcity of fossil fuels, it may also contribute to the emergence of "virtual" nuclear powers, notably in Asia and Latin America. Taken together, these factors suggest that the chances of erecting a stable, long-term mutual deterrence regime in a multi-nuclear world are slim indeed. In the view of this school of thought, the golden age of non-proliferation optimism is past. The world has entered a "second nuclear age", for which the rules have yet to be developed.

The other school of thought shares these concerns about proliferation dangers, but draws different conclusions. For this school of thought, the solution to the current crisis of non-proliferation lies in re-energising the non-proliferation process. Arguing that the crisis is largely caused by the "double standard" nature of the current non-proliferation regime, this school puts most of the blame on the Nuclear Weapons States (NWS) recognised in the NPT and their alleged failure to seriously act upon their disarmament commitment in Article VI of this treaty. Hence, the context of the debate for this school of thought is essentially one of nuclear disarmament and even the "abolition" of nuclear weapons.

Until recently, such arguments were essentially the domain of NGOs and the non-aligned movement, and could easily be dismissed as unrealistic, naïve, or specious. However, these views have lately gained considerable credibility, not least because some hard-nosed nuclear "real-

ists" such as Henry Kissinger and George Shultz have endorsed them.<sup>2</sup> Their true concern is not nuclear abolition, which they consider at best a long-term goal. Yet they seem to have concluded that in order to achieve even far more modest objectives, such as US ratification of the Comprehensive Test Ban Treaty, better verification agreements, improved security for "loose nukes", or the internationalisation of uranium enrichment, the United States must make a grand gesture to the international community. In the view of this school of thought, a renewed commitment to nuclear abolition has become the precondition for restoring the compromised moral authority and political credibility of the United States and the West more broadly.

It is not difficult to see why, from a NATO perspective, this debate is highly problematic. If the "nuclear addiction" of the NWS, notably those in the West, is increasingly interpreted as the cause of the current non-proliferation crisis, and if Article VI of the NPT is elevated into a "grand bargain" calling for the global abolition of nuclear weapons, NATO cannot limit its nuclear language to a mere description of new proliferation threats. Ignoring the arguments of the "abolitionist" school of thought would make a new Strategic Concept appear to be out of touch with political reality, all the more so as coalition parties in several governments in NATO member states might subscribe to that very school.

#### The audience

NATO's approach to nuclear matters must take many factors into account, and conceptual coherence is not necessarily at the top of the list. The political and public diplomacy requirements of an Alliance that features three Nuclear Weapons States and 23 (soon 25) Non-Nuclear Weapons States differ significantly from those of any single nation. Compared to US, British or French pronouncements on their respective national nuclear doctrines, some of which are quite explicit, NATO will have to bridge a spectrum of views that arguably runs from nuclear abolitionism to concrete fears

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<sup>&</sup>lt;sup>2</sup> George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, 4 January 2007; George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn, "Toward a Nuclear-Free World," *Wall Street Journal*, 15 January 2008.

of a resurgent Russia. Thus, the key to Alliance cohesion is to reach a consensus rather than to demonstrate intellectual rigour.

Although addressed to the publics in NATO nations and beyond, Strategic Concepts, like many other public documents, are also an essential means of communication with other international actors. At least since the 1990 London Declaration, when NATO introduced the "weapons of last resort" formula as a political signal to the Soviet Union (to allow for a united Germany in NATO), NATO's nuclear pronouncements must be seen as major *political* messages to the outside world. Within these messages, general political principles may ultimately be more important than concrete military strategies. In the absence of a specific threat, Allies may prefer nuclear ambiguity, as it avoids the problem of sending messages that might be misunderstood by multiple recipients and/or irritate one's own populations.

Equally importantly, to use Michael Howard's classic juxtaposition, *reassurance* may ultimately turn out to be more important than *deterrence*. In other words, the Allies will have to take great care to ensure that they send a credible deterrence message to potential adversaries, yet without needlessly scaring their own populations. The example of the erratic and divisive INF debate of the early 1980s serves as a healthy reminder that a public nuclear debate can never be truly "won". Even if the security environment has radically changed since then, the structural dilemmas of managing an Alliance of democratic nations have not.

## a) The adversaries

What kind of deterrence message should NATO send in a new Strategic Concept, and to whom? During the Cold War, NATO's message had to reach only one clearly defined addressee: Moscow. Moreover, this message was visibly "institutionalised" in NATO's entire defence posture.

<sup>&</sup>lt;sup>3</sup> North Atlantic Council, London Declaration on a Transformed North Atlantic Alliance, 5-6 July 1990, par. 18.

<sup>&</sup>lt;sup>4</sup> Michael Howard, "Reassurance and Deterrence: Western Defense in the 1980s," *Foreign Affairs*, vol. 61, no. 2 (Winter 1982/83).

A Warsaw Pact attack would have aimed at conquering most of Western Europe, and would have resulted in the killing of thousands of American soldiers within the first few hours of a conflict. US vital strategic interests would clearly have been at stake – and this ensured a credible link to the US nuclear arsenal.

The changes since the end of the Cold War have put an end to this unique setting. With the military disentanglement that followed the end of the Warsaw Pact and the Soviet Union, NATO's military response to aggression is no longer pre-scripted, nor is Russia still at the centre of NATO's defence planning. Rather, since the collapse of the Soviet Union, NATO has justified its nuclear deterrence posture as a general insurance policy against a range of unspecified threats. This does not preclude a growing focus on certain countries of concern in classified NATO documents, but mentioning specific countries in a public Strategic Concept appears unlikely. If NATO's military posture does still send a deterrence message, it is the rather generic message that aggression against the Alliance would be rebuffed.<sup>5</sup>

NATO's handling of both the missile defence issue and the Russian-Georgian conflict demonstrates the reluctance to communicate by way of military threats in less-than-existential situations. Although most observers agree that the US "third site" is directed at Middle Eastern threats and does not really affect Russia, and despite Russian threats to "react" by putting nuclear missiles into Kaliningrad, Allies were at great pains to reassure Moscow about NATO's benign intentions. NATO's reaction to the Russian-Georgian conflict followed similar lines. While individual Allies, notably the Baltic States, immediately demanded a review of NATO's defence planning and exercise policy, NATO's overall approach remained one of extreme caution, avoiding any signals that could be inter-

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<sup>&</sup>lt;sup>5</sup> For a rather crude yet possibly authentic Baltic critique of NATO's nuclear ambiguity, see Vaidotas Urbelis and Kestutis Paulauskas, NATO's Deterrence Policy – Time for Change?, in: *Baltic Defence Review*, Vol. 10, 2008, <a href="http://www.bdcol.ee/files/files/documents/Research/4\_%20Vaidotas%20Urbelis-Kestutis%20Paulauskas-NATO%20Nuclear%20Deterrence-Time%20for%20Change.pdf">http://www.bdcol.ee/files/files/documents/Research/4\_%20Vaidotas%20Urbelis-Kestutis%20Paulauskas-NATO%20Nuclear%20Deterrence-Time%20for%20Change.pdf</a> (accessed 8 September 2008).

preted as inflammatory. Frequent references to Article 5 remained without specific military content. All of this suggests that the nuclear language in a new Strategic Concept will refrain from too much "messaging".

NATO's nuclear posture in Europe would seem to reinforce such a low-key approach. Due to a number of arms control agreements and unilateral decisions in the 1980s and 1990s, the few remaining Europeanbased US nuclear weapons are essentially an expression of Allied solidarity and risk-sharing rather than a major military asset. In other words, US nuclear weapons in Europe are first and foremost about principle rather than posture. Even if the delivery vehicles and weapons were to be modernised at some stage, extending the nuclear mission for several decades, their symbolic aspects would continue to outweigh their operational relevance. In short, the posture reflects a generic approach to deterrence, with an emphasis on solidarity and risk sharing. For those who argue that a world with multiple nuclear powers requires a far more "tailored" deterrence approach, this will be insufficient.<sup>6</sup> However, defining North America and Europe as a single common security space – a space that is also protected by nuclear weapons – is a sensible, inherently non-aggressive message that is well worth conveying.

# b) The media

Strategic Concepts are written for the public, but it is the media rather than the proverbial "man on the street" who will be the real addressee of such a document. At the end of the day, it is through the media that the key messages of NATO's new Strategic Concept would be conveyed to Allied populations. Hence, it is important to assess how the media would react to new nuclear language in the Strategic Concept.

The challenge that NATO needs to confront is as obvious as it is frustrating: large parts of the media are in a state of ignorance on nuclear matters. Since the end of the Cold War, many Western journalists, including those who cover international and defence affairs, are no longer familiar with

<sup>&</sup>lt;sup>6</sup> On the specific dilemmas of a "tailored deterrence" concept for NATO see Michael Rühle, NATO Nuclear Deterrence and Public Diplomacy, paper presented at Wilton Park, UK, March 2008 (unpublished).

certain key concepts of the strategic discourse regarding nuclear matters. It is, for example, quite common to confuse "pre-emptive" and "preventive", or "first use" and "first strike". This suggests that the nuclear language in a new NATO Strategic Concept, irrespective of any innovative elements, must stay clear of certain "red flags", such as employment policy. Again, this suggests that Allies will opt for constructive ambiguity rather than elaborate operational descriptions.

### c) The NGO community

Even the most superficial scan of the NGO literature suggests that any new Strategic Concept that endorses nuclear deterrence and in particular European-based US nuclear weapons will be branded as proof of NATO's inherently flawed obsession with nuclear arms. If left to its own devices, the NGO community is far too peripheral and sectarian to have a significant impact on the debate in Western countries, as exemplified by its long-standing yet unsuccessful crusade against NATO's nuclear sharing arrangements. However, given the mounting concern over the global nonproliferation crisis, and in light of growing expectations about a US or Western leadership role in setting a new arms control agenda, the NGO arguments might resonate with some political leaders and certain political parties in several NATO nations. This is all the more likely as the 2010 NPT Review Conference might further raise awareness of non-proliferation matters. The new Strategic Concept would thus be composed in an atmosphere that would not seem to favour elaborate, let alone innovative, language on nuclear matters.

# d) The public

How the broader public will perceive NATO's nuclear language in a new Strategic Concept will depend mainly on the overall political context. This context will be shaped by, among other things, the situation in Afghanistan, the evolution of Russia, and global proliferation developments. It will also be shaped by the image that the United States enjoys among the publics of Allied nations. Simply put, if NATO appears to be cohesive, and if the United States is perceived as a benign leader, nuclear issues do not evoke public concern. This statement is not contradicted by

opinion polls that seem to demonstrate a certain anti-nuclear sentiment. Since security issues tend to rank rather low on most people's hierarchy of concerns, even a vague anti-nuclear sentiment will not translate into active opposition unless the overall political situation pushes security issues to centre stage. This suggests that political leadership remains of key importance. If the Allies demonstrated that they stand firmly behind their agreed nuclear policy, neither the critical media nor the arguments of the NGO community would find much resonance.

### Elements of a new strategic concept

Given the multiple-purpose nature of the Strategic Concept, its different internal and external target audiences, and in particular the different views among Allies on nuclear matters, it appears unlikely that the ambition that may characterise other parts of this document will also extend to its nuclear aspects. As long as there is no fundamental change in the security environment, e.g. an Iranian nuclear explosive test or a direct Russian military threat to NATO Allies, the handling of the nuclear issue will be dominated by the need to keep the Allies united rather than to break new conceptual ground. This cautious approach is all the more likely as the new Strategic Concept will not have to deal with the politically sensitive issue of nuclear modernisation; this challenge is likely to be tackled at a later stage. Given this setting, the language in the new document might be developed around three – admittedly familiar – elements:

First, it may include more explicit references to an emerging strategic environment characterised by the proliferation of weapons of mass destruction and their delivery means. Since the 1999 Strategic Concept already highlights proliferation dangers and even non-state actors, this should not be too difficult to agree on. Moreover, the 2006 "Comprehensive Political Guidance" also contains strong wording to this effect.

Second, it may offer an unabashed endorsement of Europeanbased US nuclear systems. The logic of maintaining a small number of highly secure US nuclear weapons in several European NATO countries remains valid. The principle of Allied risk sharing remains as important as ever – and the current Afghanistan debate demonstrates how quickly it can get under strain. Moreover, NGO arguments about a latent violation of the NPT, or about the emergence of a global norm of not stationing nuclear weapons outside the territory of the NWS, are simply not strong enough to trump the logic of extended deterrence.

Russia's heavy-handed approach to the crisis in the Caucasus in the summer of 2008 offered a striking example of how events can change European threat perceptions. Although Russia's disproportionate use of military force against Georgia arguably did not have an imminent bearing on the military situation in Europe, it nevertheless led some of NATO's easternmost members to publicly ask for changes in NATO's military planning and deployments. The palpable desire of these countries to host NATO and/or US installations on their national soil should serve as a healthy reminder of the limits of a "virtual" security presence. At the very least, it suggests that advocating a withdrawal of US nuclear weapons from Europe would be seen by some Allies as a security "minus" and that it would risk further undermining their confidence in existing security arrangements.

Third, the new Strategic Concept may reconfirm NATO's nuclear sharing arrangements. Nuclear sharing, as institutionalised in the Nuclear Planning Group and other bodies, enables non-nuclear Alliance members to have an active role in shaping the evolution of strategic policy. It allows for consultation and coordination in an unparalleled way and thus constitutes an important aspect of the very notion of "alliance". Hence, despite arguments that US extended deterrence does not require European-based nuclear systems, that the British and French nuclear deterrents would be sufficient, or that NATO should provide a major impulse for the rejuvenation of nuclear arms control, a new Strategic Concept is likely to reemphasise the sharing principle.

### Conclusion

If all this adds up to a plea for maintaining the nuclear status quo, it is because that status quo is preferable to any conceivable alternative.

With the abolitionist vision remaining unrealistic, and with notions of "tailored deterrence" remaining politically infeasible, NATO's current "nuclear acquis" appears to strike a sensible balance between the disarmers and the innovators. Holding on to the status quo might make NATO's new Strategic Concept vulnerable to charges of being not forward-looking enough on nuclear issues. But if such a document provided a more cogent rationale for nuclear deterrence and risk-sharing in the 21<sup>St</sup> century, and if it did so with clear and unapologetic language, it would have achieved a lot. As the Allies set out to prepare a new Strategic Concept, one of their key objectives should be to reaffirm that nuclear deterrence, as understood and practised within the NATO framework, remains the most enlightened way of dealing with the realities of the second nuclear age.

### CONCEPTS FOR DETERRENCE OPERATIONS

## Jonathan TREXEL\*

### Introduction

This chapter briefly and broadly describes many of the important concepts considered in deterrence analysis, planning, and operations by military deterrence analysts and planners. The core concept is that deterrence planning is purposeful and executable: one must "plan to deter," not simply hope to "deter by planning to defeat."

Deterrence is principally and ultimately a competition of wills carried out at the political level. If an adversary's leadership was considering a decision to commit an act opposed by the United States, the US would try to persuade the adversary to refrain from making that decision. Consequently, central to deterrence strategy is the concept of influence over the adversary's decision calculus by affecting his perceptions of the costs and benefits of the action he is considering and, likewise, the costs and benefits of restraint. Deterrence strategy development, therefore, carefully considers the factors germane to the adversary, and then builds a purposeful plan for the appropriate application of national power to positively influence that adversary's decision calculus.

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#### BACKGROUND

# A Strategic "Retooling"

Before describing the framework used in deterrence analysis and planning, it is important to understand the context for the development of this framework and some of the key distinctions between former and current deterrence concepts. The US Department of Defense has interpreted changes in the international security environment over the past 20 years or so in ways that have meaning for its particular responsibilities and challenges, including strategic deterrence. Recent changes in deterrence planning include the following: a shift in the conceptual foundation to one of seeking "decisive influence" over an adversary's perceptions as opposed to simply possessing key capabilities, including nuclear forces; a coherent planning process in which global deterrence resides in a single plan; and the notion that deterrence planning begins with a common analytic process entailing the development of a detailed adversary-specific strategic profile. This profile seeks to describe the adversary through a unique "deterrence lens," leading to the development of a series of probable adversary leadership decision calculi on key deterrence challenges. This makes possible an assessment of the impact of deterrent operations upon adversary decision-making. While these are all important, the dominant distinctions of this current "retooling" might be summarized as follows:

- 1) Deterrence planning must be tailored to the unique qualities of each adversary and to the unique environment, conditions, and circumstances identified with that adversary.
- 2) Deterrence planning benefits by considering, from the very beginning, how one might apply all elements of national power to address deterrence problems.
- 3) Deterrence entails operations, including activities done in peacetime. Deterrence planning is no longer simply the building of a strike plan to be placed on a shelf. It might now be better described as including ongoing, dynamic, and purposeful influence.

Whereas deterrence in the Cold War era was often conceptualized as reliance on large numbers of nuclear weapons to meet all global deterrence challenges (chiefly those arising from the Soviet Union), today the concept is to tailor one's strategies, capabilities, and actions to each adversary and then apply one's capabilities effectively to achieve the desired deterrent effects. The conceptual development is oriented toward adversary assessment because it provides not only the starting point but the essential foundation for all deterrence planning and operations. To the degree that deterrence is now tailored, or more tailored than it once was, the need has increased substantially for deep adversary analysis and assessment. Further, while there are many ways in which a governmental organization can structure itself in the post-Cold War era, strategic deterrence in its new conceptual framework appears to be moving toward "operationalization" and has the potential to become a central organizing principle for peacetime and conflict planning and operations.

### Then and Now

Part of the new challenge with Cold War deterrence thinking was that the notion of mutually assured destruction ("MAD") did not fit into all contemporary adversary deterrence problems equally, if at all. Part of the challenge, therefore, was to update deterrence planning and included reconsidering what was happening in a strategic engagement between two actors and asking whether deterrence was reducible to instilling fear of adverse consequences primarily through nuclear attack or assertions of a risk of mutually assured destruction. While the ability to impose costs on the adversary was, and always will be, an *essential* element of deterrence, various emerging adversaries and circumstances, such as asymmetry of stakes and capabilities between the US and some of its potential adversaries, suggested that this ability could not be regarded as *sufficient* for deterring all adversaries. Nor could it encompass all the hostile decisions they might make, or be relevant in all circumstances.

<sup>&</sup>lt;sup>1</sup> For a brief revisit of nuclear deterrence theory, consider, for example, Robert Powell's "Nuclear Deterrence Theory, Nuclear Proliferation, and National Missile Defense," *International Security*, Vol. 27, No. 4 (Spring 2003), pp. 86–118. See pp. 88-93.

Effective deterrence operations are about influencing adversary decision-makers. As noted above, deterrence involves a contest of political wills that entails an influence campaign against an opponent. It is a strategic and political enterprise employing various levers intended to protect one's own security. According to the DO JOC:

Deterrence operations convince adversaries not to take actions that threaten US vital interests by means of decisive influence over their decision-making. Decisive influence is achieved by credibly threatening to deny benefits and/or impose costs while encouraging restraint by convincing the actor that restraint will result in an acceptable outcome.<sup>2</sup>

The definition requires a *tailored approach* in that it is adversary-centric and adversary-specific (and may include non-state actors). It focuses on threats to US vital interests, as opposed to aggression in general. The US is directing its efforts against an adversary's decision-making calculus instead of trying to deter by hoping that a plan to defeat the adversary with a collection of strategic capabilities will be sufficient.

### ESSENTIAL CONCEPTS

### Assumptions

Identifying assumptions is important to any planning effort, including deterrence planning. Since deterrence is adversary-centric, key assumptions focus upon one's understanding of the adversary in the context of decisive influence, and include the following:

1) Adversary actions to be deterred result from deliberate deci-

<sup>&</sup>lt;sup>2</sup> DO JOC, page 8. US vital interests might include: maintaining the integrity of US territory; preserving basic political sovereignty and societal integrity within the US; preventing mass casualties among the US population; securing critical US and international infrastructure assets (energy, telecommunications, water, essential services, etc.) that support the basic US standard of living and economic viability; and supporting the defense of US friends and allies.

sions to act, not from automatic responses, or unintended or accidental events.

- 2) Adversary decisions to act are based on calculations regarding alternative courses of action and perceptions of the values and probabilities of alternative outcomes associated with those courses of action.
- 3) Adversary values and perceptions relevant to decision-making can be sufficiently identified, assessed, and influenced through action (or inaction) by others.
- 4) Adversary decision-makers are rational; that is, they calculate and develop and implement strategies to reach objectives, though they often take actions that may seem unreasonable to observers viewing them from the perspective of their own value structure. Truly irrational actors are likely to be extremely rare in strategic deterrence challenges.<sup>3</sup>

# The Core Concept

Deterrence operations are US actions chosen to achieve decisive influence over adversary decision-making concerning actions under consideration that threaten US vital interests. Decisive influence is achieved by credibly threatening to deny the adversary the benefits he seeks through his action and/or to impose costs upon him, and by addressing his assessment of the costs and benefits of restraint. The aim is to convince the adversary that restraint will result in an acceptable outcome, though it may be imperfect or frustrating in his view.

<sup>&</sup>lt;sup>3</sup> Irrational actors might be individuals impaired by severe mental health problems, under the influence of judgment-impairing drugs, or leaders who make decisions based on random "signs" such as astrology or religious oracles. Rationality is assumed, however, in the absence of signs of irrationality. The assumption of the adversary's rationality permits the development of deterrence strategy upon an understanding of adversary values and other factors. Keith Payne's book *The Fallacies of Cold War Deterrence and a New Direction* (Lexington: University Press of Kentucky, 2001) is particularly insightful in this discussion.

Deterrence success, however, is not guaranteed simply by convincing the adversary that the costs of acting outweigh the benefits of restraint. If an adversary fears the costs of restraint, such as the prospect of unrealized gains or internal political upheaval associated with broken promises, more than the costs of acting, he may perceive the option of taking egregious action as his "least bad option," obviously an outcome the US wants to avoid. This is why it is important that deterrence planning and operations seek to understand and then influence all aspects of the adversary's decision calculus in order to improve the prospects of obtaining outcomes favorable to the US.<sup>4</sup>

Because an adversary's decision calculus is based on unique perceptions, deterrence is inherently adversary-centric and situation-specific. Adversary decision-makers have unique values, cultural characteristics, historical experiences, personal attributes, understanding of their strategic circumstances (including military capabilities, vulnerabilities, and regional relationships), and modes of decision-making, all of which contribute to how and why they make specific strategic decisions. Similarly, specific situations can profoundly shape the context in which adversaries make decisions. For example, the specific situation in which the adversary is calculating can inform whether he perceives a fleeting opportunity for gain or an urgent imperative to avoid loss. The latter would probably be a much more difficult deterrence task.

# On "Tailoring"

Because deterrence planning is purposeful, the "tailoring" of deterrence is essential. Tailoring can be summarized as the appropriate application of power to achieve the deterrence objective. In military doctrinal parlance, one might think of tailored deterrence as *cognitive mass*, that is, the application of a precise type and quantity of influence, at the

<sup>&</sup>lt;sup>4</sup> For a case study on an adversary's decision calculus dominated by "costs of restraint," see Roberta Wohlstetter's book, *Pearl Harbour: Warning and Decision* (Stanford, California: Stanford University Press, 1962). Such was the weight of the domestic and internal pressures to expand the Japanise empire as promised that Japan actually chose to *attak* the large US fleet, which had been concentrated in Hawaii specifically as a US deterrent against Japan.

precise place and at the precise time. Cognitive mass associated with tailored deterrence seeks to decisively influence the adversary so that he will not make a specific decision to act. Modern deterrence tailoring involves several specific features.

First, during the Cold War era the primary deterrence effort, though not the exclusive one, was to influence Soviet decision-making about going to war. Today, however, deterrence objectives can include decisions to go to war, various decisions in war (such as taking a certain course of action or escalating with certain weapons), or decisions involving third parties such as decisions to sell, transfer, or acquire Weapons of Mass Destruction (WMD). One also seeks to deter an adversary's decision to engage in aggression or coercion against a US ally or friend.

Second, tailoring to specific adversaries and their motivations and intentions is important since each adversary possesses unique intentions and motivations. As a result, the tools one might employ to influence one adversary might differ substantially from those relevant to another adversary, even if their decisions might be the same, such as a decision to acquire a certain type of WMD.<sup>5</sup>

Third, one needs to tailor deterrence by time factor, that is, within the context of peacetime, crisis, or conflict conditions. For example, an adversary may be better able to hear messages sent in some circumstances than in others. He may be in hiding or on the run in times of conflict.

Fourth, one might consider tailoring by whether the strategy is intended to have short-term or long-term effects. For example, if the concern involves a state's acquisition or development of nuclear weapons, one might employ a short-term strategy including denying the adversary access to the various parts of the nuclear fuel cycle and raising the value of cooperation so as to enhance stability through economic interdependen-

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<sup>&</sup>lt;sup>5</sup> See M. Elaine Bunn's article, "Can Deterrence Be Tailored?," located online at http://www.ndu.edu/inss/Strforum/SF225/SF225.pdf

cies and treaties. A broad US government strategy might also incorporate the cultivation of pursuing common interests such as fighting disease, hunger, and famine, and promoting education and human capital investment, all the while threatening to impose costs on aberrant behavior. In contrast, a long-term strategy might be to lessen the value attributed to nuclear weapons as a means of guaranteeing security by reducing fears of external attack. Addressing both long and short-term strategies allows the coupling of deterrent objectives and actions from peacetime to crisis or conflict and a more consistent overall US national deterrence strategy.

### Strategic Decision-Making Framework

The decision-making framework starts with the deterrence objective. As noted above, deterrence objectives might range from deterring adversary decisions to go to war to decisions to take certain actions during conflict. Efforts to achieve *specific* deterrence objectives, or to influence adversary decisions that fall below the level of decisions to wage war have considerable analytic and planning value as they allow deterrence planners to better understand certain escalation problems and help identify crisis-escalatory off-ramps before a real crisis occurs.

Deterrence methods include shaping adversary perceptions in four areas:

- The perceived benefits and costs of taking the action under consideration.
- The perceived costs and benefits of refraining from taking the action.<sup>6</sup>

Note that in the adversary's decision-making calculus, factors of taking action and factors of refraining from action are blended so that any decision includes elements of all four of the calculus quadrants. In other words, adversary perceptions can be thought of as those that *undermine* deterrence (perceived benefits of action and perceived costs of restraint) and those that *enhance* deterrence (perceived costs of action and perceived benefits of restraint). Formerly, deterrence might have been predicted to be

<sup>&</sup>lt;sup>6</sup> For more on the framework, see development of the "Central Idea" in the DO JOC, especially pp. 19-27.

effective simply if the adversary thought that his potential costs outweighed the probable benefits. The strategic decision-making framework presented here, however, suggests that deterrence might be more effective if the adversary's perceptions on the "enhance" side of the decision calculus ledger outweighed those on the "undermine" side. Strategy is developed, therefore, to *moderate* the perceptions that incentivize him to action and therefore undermine deterrence, while seeking to *reinforce* the perceptions that incentivize restraint and enhance deterrence.

Thinking about the adversary's decision calculus in this way can be a useful framework for formulating strategy effects and identifying concrete actions to achieve decisive influence over the adversary's decision-making. The identification of an adversary's perceptions, together with an assessment of the values and probabilities the adversary leader might ascribe to those perceptions, serve as the template on which to develop measurable deterrent effects, orient deterrence actions, organize planning, and identify intelligence and capability needs related to deterrence.

The calculus assessment might also explain the extent to which an adversary is risk-averse or prepared to take risks, and thus suggest to the deterrence planner alternatives for avoiding conflict or deescalating an ongoing conflict.

## Impact Assessment

One of the more difficult challenges in deterrence planning and operations is assessing how deterrent actions might affect adversary perceptions.<sup>7</sup> Impact assessment seeks to provide the planner with a qualitative judgment as to which deterrence actions might be more useful in achieving the desired deterrence effects. For example, an adversary might perceive a high probability of achieving a certain benefit if he decided to launch a missile toward a particular target. The deterrence analyst might assess, however, that the visible deployment of reliable missile defenses near that target would probably reduce the adversary's confidence about gaining that benefit.

<sup>&</sup>lt;sup>7</sup> For more on impact assessment, see the DO JOC, especially pp. 48-55

Each potential deterrent action, whether diplomatic, informational, military, or economic, is assessed in relation to the desired deterrent. In this way, potential deterrent actions can be evaluated for their utility in achieving the desired deterrent effect. However, while this technique might provide insights into the *direction* adversary perceptions might be expected to go in response to deterrent actions, it does not predict the *magnitude* of the impact of the actions nor whether or when deterrence might fail.

### **CHALLENGES**

### Analysis & Planning

Comprehensive deterrence analysis and planning requires considerable expansion, improvement, and refinement. Analysis and planning will not be conducted without surmounting many challenges. Diligence, thoroughness, and a commitment to quality analytic resources may be helpful in this regard.

First, tailored deterrence can only be as good as the research, analysis, and assessment brought to bear on planning and operations, especially in peacetime status quo conditions. Integration of deep, strategic, cultural research and analysis takes considerable time and resources. The more effort put in early, however, the higher the payoff in deterrence planning and operational effectiveness.

Second, effective deterrence operations should involve all elements of national power. Deterrence planning should be collaborative within DOD, across the US Government, and with key international partners in order to achieve the desired deterrent effects. Such planning requires extensive collaboration, communication, and cooperation, as well as a common deterrence lexicon. Deterrence operations may prove to be only as effective as the advance collaborative planning.

Third, deterrence planning must account for uncertainty. For example, planning could identify which essential pieces of information are

not known; reduce the areas of ignorance, if possible; take into consideration what is not known in deterrence plans by considering alternative analyses; and take into account risks associated with simply getting the analysis wrong.

Fourth, deterrent actions might have effects beyond the intended adversary leadership. For example, deterrent actions may affect other states, adversaries, or non-state actors in other regions of the world. Deterrence actions may have assurance, dissuasion, and defeat effects, as well as expected (and unexpected) deterrent effects. Further, effects may beget effects. That is, an action taken primarily to *defeat* one particular adversary might yield a secondary *deterrent* effect upon another which, in turn, may have tertiary effects of *dissuasion* on a third adversary and *assurance* of a key regional ally. The consequences may be complex, and pre-execution assessment is a formidable task.

### Non-State Actors

The deterrence planning challenges for non-state actors (NSAs) are more difficult than for states.<sup>8</sup> It is harder to determine specifically who exactly is to be deterred. Greater uncertainty exists regarding how NSAs perceive costs, benefits, and consequences of restraint regarding actions one seeks to deter. NSAs differ in their susceptibility to US efforts to credibly threaten cost imposition. The values, goals, objectives, and means of NSAs differ from those of state actors. Unlike states, NSAs do not have established communication channels with the United States government.

Since an NSA's decision calculus might not easily be influenced through imposing perceived costs, special consideration in deterrence planning and operations might be given to influencing NSA decision-mak-

<sup>&</sup>lt;sup>8</sup> For more on deterring NSAs, see the DO JOC, especialy pag. 18-19

ing by benefit denial. Some examples, in the author's view, could include:

- Disrupt adversary sources of support, including states, networks, and individuals.
- Restrict access to the means of proliferation to deny them WMD capability components.
- Dissuade recruits.
- Diminish effects by providing protective measures for military personnel and civilians.
- Defense of one's own high value assets.

### CONSIDERATIONS FOR OPERATIONS

Specificity, focus, and caution are vital for successful deterrence operations. The considerations discussed below are intended to draw attention to the need to construct a strategic deterrence analytic and planning "bridge" between conceptual ideas and deterrence operations.

### Leaders

As noted previously, deterrence is, first and foremost, a competition of wills between leaders. Execution of deterrence operations must, therefore, resist the temptation in a crisis to put forward options based simply upon what one can do with available capabilities. The focus must be retained upon the adversary and what one should do given one's knowl-

<sup>&</sup>lt;sup>9</sup> Non-state actors might believe that because the US has declared a Global War on Terror that the US is not holding anything back in terms of imposing costs. The US could therefore explore ways to effectively communicate the message that additional costs might still be imposed. Further, the US might also find ways to influence adversary cost perceptions that do not involve direct retaliation. For example, it might be possible to influence the adversary's perception of the possible political impact of conducting attaks. Deterring NSAs, in the context of the ongoing Global War on Terror, could include causing them to delay their attaks long enough to afford the US the opportunity to locate, capture, or destroy the terrorists and their networks.

edge of the adversary's decision calculus. Decisions to go to war or to use a nuclear weapon are not made by an ideology, a culture, a people, a state, an agency, an institution, or a computer model (though these things *affect* decision-makers): such decisions are made by a single person or by a handful of individuals who control the reins of power.

### **Effectiveness**

Deterrence might prove most effective when it avoids confusing adversary leaders and involves a *single message conveyed by many voices*. If the executive says one thing and the legislature another, the adversary might not respond the way one prefers. Deterrence voices might include different branches of government, different departments in the executive branch, different commands and agencies within DOD, and other interested governments. Coordination, integration, and synchronization of such disparate voices is important but is difficult and, to undertake most effectively, might require the alteration of existing national security organizational structures.

# Credibility

Deterrent actions or messages, whether in the form of the carrot or the stick, must be credible in the mind of the adversary. Unimplemented threats to punish, as well as un-honored promises of rewards for adversary restraint, will undermine the credibility of future deterrence operations. A reputation for not following through with threats or promises could diminish the influence sought over the adversary's perceptions. In contrast, threats followed up by decisive punitive action will be a powerful instrument of increasing one's deterrent credibility. The challenge is to build and employ deterrent capital appropriately.

# Long-term

Efforts to shape or condition adversary perceptions in peacetime may have effects in a crisis or conflict, especially in time-compressed decision-making scenarios. Since perceptions held in a crisis or conflict could take years to develop, the assessment challenge is to understand what perceptions the adversary might hold in a potential future crisis or conflict and determine what might be done today to begin the process of positively shaping his perceptions.

### **End-state Deconfliction**

Deterrence strategy aims at preventing aggression or coercion against the US and its allies. It operates in parallel with broader US regional strategies aimed at enhancing the prospects for improved relations between the US and other states, including those considered adversaries. The challenge is to harmonize these strategies so they do not undermine each other.

### **Operative**

Deterrence strategy remains theoretical until it is *made operative* by putting it into motion and governmental actions are actually taken. An adversary's misbehavior cannot be attributed to a failure of deterrence if no attempt to deter was made in the first place. Also, an adversary's restraint may be due to factors other than one's deterrence effort. This is the risk inherent with measuring deterrence success based simply upon an adversary's inaction: long periods of restraint could suddenly end without reason, at least from a US perspective. The challenges for intelligence professionals include finding indicators of deterrence failure (though one might argue that this is the easy part), and providing innovative ways to determine causes and effects in relation to deterrence actions and adversary perceptual and behavioral change.

# **Capabilities**

Deterrence strategy can inform improvements in military capabilities, a process that may in turn enhance deterrence. For example, an adversary might be able and willing to influence a US ally to deny basing access to US ships or aircraft, ride out ballistic missile attacks, deploy redundant and hardened C3, and/or deploy credible missile defenses. He might challenge the credibility of US threats of attack, emboldened by perceptions of his own strength and his assessment of US political will and military capability. The challenge is to understand adversary perceptions of US capabilities (both accurate and mistaken) and adjust deterrence

strategies by improving US military capabilities and/or communicating the facts about existing capabilities to adversaries more effectively.

# Simplicity

Deterrence analysis and planning should try to be as comprehensive as possible. However, comprehensive planning might be in tension with the simplicity and coherency needed to effectively influence one's adversary. First, one might consider numerous actions to try to influence adversary leaders. Second, coordinating actions across the DIME spectrum (diplomatic, informational, military and economic options) so that everyone agrees what must be said and done, and on how it will be synchronized in a sort of choreographic manner, is likely to be difficult and time consuming, and might be particularly problematic if time is of the essence. Third, any deterrence influence campaign must be integrated and consistent with all other US national policies, strategies, and influence campaigns, so that deterrence messages are not incompatible with US foreign policy, regional strategies, existing agreements, etc. Fourth, while it is possible to conduct many actions and communicate many messages to an adversary leadership, a profusion of messages may complicate that leader's task of deciphering US intent, especially if some signals appear contradictory.

### Structural Mechanisms

Strategic deterrence is not simply a DOD task: it is an imperative for the entire US Government (USG). However, in the author's view, the USG is not structured or equipped to effectively plan and deliver national deterrence strategies. The long-term task requires a comprehensive, permanent, and stable deterrence-oriented organizational structure. In the short term, a way forward is urgently needed to: conduct comprehensive adversary analysis and link that analysis to military deterrence plans and operations; integrate and synchronize military power with other elements of US national power; authoritatively integrate national deterrence strategies with other US strategies and policies; and coordinate USG deterrence strategies with those of US allies and partners in order to cooperatively address common deterrence challenges. One practical solution with strategic impact is the establishment of a global deterrence network.

- The global deterrence network concept, being developed by the author, envisions the following:
- First and foremost, creation of a National Deterrence Center, perhaps located at USSTRATCOM, providing the means of effective strategic deterrence research, analysis, planning, operations, and evaluation, as well as the coordination of military aspects of strategic deterrence planning.
- Second, formation a National Security Engagement Center in Washington, DC (connected to the National Security Council) to formalize "smart power" integration for the enhancement of US national security and foreign policies, including integrating military ("hard power") with other US policy instruments (non-military, "soft power") for deterrence objectives and synchronizing deterrence with other US strategies and policies.

Third, development of a web of interconnected Regional Deterrence Centers at DOD Geographic Combatant Command headquarters to support synchronized deterrence operations execution in-theater, as well as a NATO Deterrence Center in Brussels for conducting collaborative Alliance planning on short and long-term deterrence objectives.

#### **SUMMARY**

The deterrence analytic function is intended to clarify the adversary's decision calculus, develop potential deterrent actions; and assess their effects. The results of that analysis will inform and improve deterrence planning and define critical deterrence intelligence and military capability requirements. These functions and their results may lay the essential groundwork for the "operationalization" of strategic deterrence in the 21st Century.

The relatively new US process for strategic deterrence research, analysis, planning, operations, and assessment is adapting to the changing international security environment. While strategic deterrence is intended

to provide decisive influence over adversary decision-making, it might well be argued that the process of moving from problem to solution is an art and a work in progress. The distance between concept definition and positive adversary behavioral change is no doubt significant. However, in developing this process, US and NATO deterrence strategists and planners are not only seeking to deter adversaries from undertaking aggression or coercion, but also to promote greater mutual understanding of their deterrence efforts. This paper is intended to serve as a contribution to this dialogue within the Alliance.