21

NDC OCCASIONAL PAPER

NATO Defense College
Collège de Défense de l'OTAN

NATO and the Future of the Nuclear Non-Proliferation Treaty

Research Branch • Rome, May 2007

NATO DEFENSE COLLEGE
COLLEGE DE DEFENSE DE L'OTAN

Academic Research Branch
Branche Recherche

NATO AND THE FUTURE OF THE NUCLEAR NON-PROLIFERATION TREATY

Edited by Joseph F. Pilat and David S. Yost
Rome, May 2007

NATO DEFENSE COLLEGE

NATO Defense College Cataloguing-in-Publication-Data:
NATO and the Future of the Nuclear Non-Proliferation Treaty.

Editors: Joseph F. Pilat and David S. Yost
p. cm. (NATO Defense College "NDC Occasional Papers Series")
Publications Assistant: Laurence Ammour

Copies of this NDC Occasional Paper may be obtained direct from the
NATO Defense College, Academic Research Branch
Via Giorgio Pelosi, 1 - 00143 Rome, Italy
Fax +39-06-50 52 57 97
E-mail: research@ndc.nato.int
Web site: http://www.ndc.nato.int

Printing: 600 copies

Printed and bound by
CSC. GRAFICA s.r.l. – Via Meucci, 28 - 00012 Guidonia, Roma
Zona industriale S.Sinforosa
Tel 0774 353308 - 0774 354410 Fax 0774 578014

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

The Editors would like to express their deep appreciation to the co-sponsors of the workshop on which this volume is based: the Los Alamos National Laboratory and the NATO Defense College in Rome.

At the Los Alamos National Laboratory, particular thanks are owed to the Laboratory's Director, Michael R. Anastasio; the Principal Associate Director – Weapons Programs, Glenn L. Mara; and the Director of the National Security Office, Paul C. White.

At the NATO Defense College, the host of the workshop, particular appreciation is expressed to the Commandant, Lieutenant General Marc Vankiersbilck; the Dean, Dr. Samuel Grier; the Director of Academic Planning and Policy, Brigadier General Dr. Klaus Wittmann; the Chief of the Academic Research Branch, Rear Admiral Jean Dufourcq; and the staff members who ensured the positive functioning of all the practical aspects of the workshop, Maria Di Martino and Veronika Necasova.

Finally, the Editors would like to thank warmly Laurence Ammour, who gave them great assistance in preparing this collection of papers for publication.

Joseph F. Pilat and David S. Yost
Rome, April 2007

INTRODUCTION: NATO AND THE FUTURE OF THE NPT

Joseph F. PILAT[1] and David S. YOST[2]

On 12 September 2006, the NATO Defense College and the Los Alamos National Laboratory held a workshop entitled "NATO and the Future of the NPT." This introduction provides a summary of the workshop deliberations, based on the papers collected in this volume and the discussion they generated, concerning the future of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the implications for the Alliance.

The Future of the NPT

The participants agreed that the NPT is under challenge. Since the late 1990s, there has been growing concern about increasing proliferation dangers, including rogue states and terrorists; cooperation on weapons of mass destruction (WMD) among rogue states; technology diffusion via the Internet as well as through "loose nukes," materials leakage and brain drain from former Soviet republics, Pakistan and other states and through non-state actors like the A. Q. Khan network; and problems with export controls. The prospects of radiological or nuclear terrorism are seen to be rising; and concern over a proliferation/terrorism nexus after 9/11 has never been higher.

---

[1] Senior Advisor, Director's Office, Los Alamos National Laboratory, Los Alamos, New Mexico. The views expressed are the author's alone and do not represent those of the Los Alamos National Laboratory, the National Nuclear Security Administration, or the Department of Energy.

[2] Professor, Naval Postgraduate School, Monterey, California, currently on secondment to the NATO Defence College, Rome, as a Senior Research Fellow. 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.

Non-proliferation efforts are under increasing pressure in the face of today's challenges, some of which are unprecedented.

In particular, the NPT, the centerpiece of the regime, is challenged by:

- nuclear weapons acquisitions by states which cannot be accommodated within the treaty and which affect the views of key states such as Japan and Brazil;
- North Korea's withdrawal from the treaty and subsequent nuclear test;
- growing access to sensitive technologies and emerging virtual weapon programs, including Iranian programs that raise the troubling issue of non-compliance with the treaty's provisions and, beyond that, demonstrate the seriousness of the Article IV "loophole";
- limited consensus on compliance enforcement; and
- the issue of its limited relevance to activities by non-state actors, including black marketers and potential nuclear terrorists.

Despite these challenges, the treaty cannot be amended or replaced, unless perhaps following a crisis. Because it is an essential framework for non-proliferation, arms control, and disarmament, the view that it needs to be strengthened, internally and externally, was widely shared.

Article IV and nuclear fuel cycle technologies

The workshop participants seemed to be in general agreement in supporting the promise of the NPT's Article IV, which provides for the peaceful uses of nuclear energy. It was widely held that the focus should be on incentives to accept arrangements such as nuclear fuel leasing assurances and the take-back of spent fuel by suppliers. Questions remained as to the nature of desirable restrictions on access to the technology of the full nuclear fuel cycle, and as to whether differences on such issues can be resolved.

Some participants noted that efforts to devise formal restrictions on the transfer of nuclear fuel cycle technologies have created what one called "bad blood" in relations with some countries. As nuclear power plants spread to address growing energy needs, steps should be taken to

make this technology diffusion as proliferation resistant as possible by such means as limiting access to the most sensitive parts of the fuel cycle dealing with enrichment and reprocessing. Paradoxically, the move to create incentives that would discourage the diffusion of these fuel cycle technologies may be prompting some nations to obtain enrichment technologies, so that they will be "on the right side of the fence" if restrictions are established.

When one participant observed that reliance on foreign suppliers of nuclear fuel would be cheaper than developing and operating a national fuel cycle, another pointed out that decisions on such matters include subjective factors in addition to economic rationality. That is, pride in national sovereignty and autonomy may not have a quantifiable economic value, but may be of decisive importance in seeking a full nuclear fuel cycle in some cases.

Article VI issues

The participants agreed that, while NATO's interests in the NPT extend beyond Article VI, issues associated with Article VI must be addressed in a persuasive fashion.

In terms of compliance with Article VI, which concerns measures related to nuclear arms control and disarmament,[3] the record is clear regarding reductions in warheads and delivery systems since 1991 by France, the United Kingdom, and the United States, as well as by Russia. However, these achievements need to be better publicized, notably the U.S. stockpile decisions and actions. The U.S. stockpile of nuclear weapons will by 2012 be near half of what it was in January 2001, when President George W. Bush took office, and the smallest U.S. nuclear stockpile since the Eisenhower administration. In the view of some states, however, the Article VI-related measures taken by NATO's nuclear-weapon states (especially the United States) are insufficient.

[3] According to Article VI of the NPT, "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."

The workshop participants noted that the fact that the United States has not adhered to the Comprehensive Test Ban Treaty is seen as an important Article VI issue for some states, but they differed as to how much significance to attach to this issue, in view of the fact that the United States has continued to observe the moratorium on testing in place since 1992. Moreover, as some participants observed, the United States is taking steps under the stockpile stewardship program and seeking a Reliable Replacement Warhead design to lessen the likelihood that it will ever have to conduct nuclear tests again.

The workshop participants also noted that no negotiations have yet taken place on a Fissile Material Cut-Off Treaty (FMCT), although a U.S. draft treaty was presented to the Conference on Disarmament in 2006. Critics of the nuclear-weapon states have frequently demanded the conclusion of an FMCT in relation to Article VI of the NPT. The question of whether an FMCT verification regime is necessary or feasible was raised. Some workshop participants argued that a verifiable FMCT is feasible. However, others pointed out that the enrichment facilities in North Korea have still not been identified, and that one of the illegal facilities in Iran was discovered only because a political opposition group in Iran revealed its existence. Moreover, some workshop participants observed that four of five NPT-recognized nuclear-weapon states (all except China) have instituted moratoria on the production of fissile materials.

Another issue raised at the workshop was whether a new paradigm for Article VI-related achievements, one based on political practicalities, is taking shape. The three NATO nuclear-weapon states have made substantial capability reductions since 1991 both within and outside the scope of formal arms control treaties. Some argued that further nuclear warhead reductions should be formalized in treaties with verification provisions, while others stressed that attention needs to be placed on positive results rather than formal treaties.

The Article VI debate has had a limited impact on NATO policies and posture to date, but it could have a corrosive effect, owing to differences of perception among the Allies and other states about the reality of the Article VI-related achievements of the NATO nuclear-

weapon states. For example, one workshop participant argued that the Allies must take action to "push back the salience of nuclear weapons" and deplored reported U.S. plans to develop "bunker-busters" and "mini-nukes" as "employable weapons." Another workshop participant pointed out in reply (a) that there are no such development programs in the United States, (b) that the United States has not developed a new warhead design for 20 years, and (c) that congressional approval will be required even to develop the Reliable Replacement Warhead, which does not provide new military capabilities, and is intended to reduce the likelihood that the United States will ever need to resume testing of nuclear weapons.

Workshop participants disagreed on the extent to which there is a relationship between non-proliferation and nuclear disarmament. Some participants noted that Iran and North Korea appear to have pursued their nuclear programs in complete indifference to the nuclear weapons reductions made by Britain, France, Russia, and the United States since the early 1990s. Other participants said that progress on Article VI-related nuclear disarmament matters to many non-nuclear-weapon states party to the NPT, including NATO allies. These states use the lack of greater Article VI performance by the nuclear-weapon states party to the NPT to justify not adhering to the Additional Protocol and not supporting pressure against countries found in non-compliance with safeguards agreements by the International Atomic Energy Agency (IAEA).

Article X issues

Article X of the NPT concerns withdrawal provisions, and these provisions require more attention. The workshop took note of a Franco-German proposal designed to ensure that states withdrawing from the NPT cannot benefit from technologies and materials acquired under NPT auspices. It was suggested that withdrawal should be made more difficult, but it was acknowledged that withdrawal is a sovereign right of all states party to the NPT.

NPT enforcement in cases of non-compliance

The workshop participants generally agreed that it is imperative to take steps to improve means for the enforcement of NPT obligations and to deal with cases of non-compliance. The UN Security Council is of central importance in this regard. Indeed, Iran and North Korea are testing the role of the UN Security Council in the non-proliferation regime. There are, however, clearly differences among the NATO Allies regarding the use of force and the extent to which meaningful UN Security Council action can be expected.

Weaknesses in the NPT regime

Some workshop participants highlighted inherent weaknesses in the NPT regime. A situation similar to Iran's current acquisition and exploitation of enrichment technology under NPT auspices was foreseen in the 1970s by Albert Wohlstetter, who wrote about "Spreading the Bomb Without Quite Breaking the Rules."[4] Iran's claim that it has "a right to enrich" and that in upholding this right it is defending the right of other non-nuclear-weapon state parties to the NPT has won widespread support among countries in the Non-Aligned Movement. There is thus a risk of Iran acquiring a "break-out" capability and of further "latent or virtual proliferation" as more countries obtain fuel-cycle technologies under NPT auspices.

The UN Special Commission's discoveries in 1991 about the progress in the Iraqi nuclear weapons program undermined confidence in International Atomic Energy Agency safeguards. The Additional Protocol has not fully restored confidence in the IAEA, partly because of the Additional Protocol's own shortcomings and partly because a number of nations have declined to adhere to it.

Other developments have also undermined the NPT. For example, the discovery of the A.Q. Khan network for illicit transfers of nuclear technology highlighted the fact that the authors of the NPT were

[4] Albert Wohlstetter, "Spreading the Bomb Without Quite Breaking the Rules," *Foreign Policy*, no. 25 (Winter 1976-1977), pp. 88-96, 145-179.

mistaken in assuming that such transfers could only be made by states with advanced nuclear capabilities.

Prospects for UN Security Council leadership

Several workshop participants underscored the legal authority and responsibility of the UN Security Council to take action regarding specific cases of non-compliance and to strengthen the NPT-based non-proliferation regime. Some said that a "robust" and "credible" UN Security Council response to Iran's behaviour may be the key to restoring confidence in the NPT.

However, as suggested above, workshop participants held out little hope for such action by the UN Security Council. The IAEA has reported repeatedly to the UN Security Council since 1993 that North Korea has been in non-compliance with its safeguards agreement, and the UN Security Council has taken no action. Nor did the UN Security Council take any action in 2003 when North Korea gave notice that it was withdrawing from the NPT, or in 2004 when North Korea declared that it had produced nuclear weapons. Although the Security Council has acted on Iran, the Council's reaction to continuing Iranian defiance remains to be seen.

Some workshop participants said that one of the factors explaining inaction by the UN Security Council is the increasing importance of priorities other than non-proliferation. China has made clear that it will veto any resolution adverse to North Korea. From China's perspective, Iran is "far away" and an important source of oil essential to China's economic growth. Energy supplies and the world energy market have become so significant for both China and Russia that it appears that these two NPT-recognized nuclear-weapon states may be prepared to accept Iran's becoming a de facto nuclear power. One workshop participant added that Russia may be the main beneficiary of the Iran crisis, because the increase in oil prices adds to Russia's export earnings.

Implications for NATO

NATO policy on the NPT

The Allies have often expressed, as at the June 2004 Istanbul Summit, their "commitment to reinforcing the Nuclear Non-Proliferation Treaty, the cornerstone of non-proliferation and disarmament, and ensuring the full compliance with it by all states Party to the Treaty."[5] However, there has been a long-standing consensus among the Allies that they should not duplicate within NATO the work that they are doing in other institutional frameworks. There has been no coordination of positions by the NATO Allies before NPT Review Conferences or deliberations in other international fora.

One workshop participant noted that the Alliance has had a "good" policy framework for examining nuclear proliferation issues since 1994, yet the discussions within the Alliance have often been "too separate," with not enough dialogue between the people monitoring proliferation and the people formulating NATO strategy and defining force requirements. There is "not enough cross-talk" between people with related responsibilities, and there is not enough discussion of strategic options in NATO. For example, the Allies rarely discuss basic concepts such as deterrence by denial and deterrence by threat of punishment, and how missile defence could contribute to deterrence.

NATO and supplementing the NPT-based non-proliferation regime

NATO's non-proliferation role is limited, but it could be expanded, in view of the common ground among the Allies concerning non-proliferation policy. The Allies will probably remain divided on interdiction and preventive action. A question that merits more analysis is to what extent NATO can supplement national efforts.

Some workshop participants argued that the Allies, working collectively or at least by coordinating national efforts, could contribute

[5] Istanbul Summit Communiqué, 28 June 2004, paragraph 14.

more to "hands on" activities that may usefully supplement the NPT. These could include UN Security Council resolution 1540, the Proliferation Security Initiative, strengthening export control measures, and incentives to discourage the further diffusion of nuclear fuel cycle capabilities for enrichment and reprocessing.

The Allies have been discussing, one participant noted, possible roles for NATO in the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism. No decision has been reached, partly because the discussions "quickly become theological."

NATO's contributions to nuclear non-proliferation

Some workshop participants observed that the Alliance's nuclear consultation arrangements and the commitments made by the United Kingdom and the United States to the security of their Allies have contributed directly to nuclear non-proliferation goals by obviating the need for other Allies to seek nuclear weapons. France has also contributed to the overall nuclear deterrence posture of the Alliance, though without participating in its nuclear consultation arrangements. One participant hypothesized that the NPT would never have been concluded without the Alliance's nuclear deterrence arrangements and that, absent these arrangements, there would today be additional nuclear-armed European states.

Missile defence

Some workshop participants said that the cost of missile defences for the protection of NATO territory and populations would be so high as to be prohibitive for Allied governments. One participant said that if Iran becomes a nuclear power, the Alliance's capabilities to retaliate in the event of aggression "ought to suffice" for deterrence; and, in his view, missile defence capabilities do not deserve any expenditure of NATO's "time or money." In contrast, some workshop participants saw an important role for missile defences to enhance deterrence, as well as in crisis management in the event of confrontations with Iran.

NATO and nuclear deterrence

One participant said that the Alliance ought to undertake a more comprehensive discussion of nuclear deterrence. France does not participate in the deliberations of the Nuclear Planning Group (NPG), and the NPG's deliberations are focused on British and U.S. non-strategic nuclear forces. A more comprehensive discussion would include U.S. strategic nuclear forces as well as all French and British forces.[6]

While one participant agreed that a more open discussion among Allied governments about nuclear deterrence issues would be valuable, another said that European governments are "intimidated" by the prospect of such a debate.

The future of U.S. nuclear weapons in Europe was discussed. There was broad support for the continuing presence of US nuclear weapons in Europe. A few participants argued that these forces could be removed and that Article VI benefits might result. Even those who advocated change held that it should not be undertaken precipitously and that it should be preceded by extensive consultations and full coordination within the Alliance.

Some workshop participants noted that reductions in warhead numbers are not the only element in reducing nuclear risks. On the contrary, it was argued that excessive reductions in warhead numbers in an uncertain security environment could pose risks for NATO. The Allies have, it was noted, tacitly endorsed a role for nuclear forces in deterring adversaries armed with nuclear, biological, and chemical (NBC) weapons, if one assumes that official references to "forces" encompass the Alliance's nuclear capabilities. According to the 1999 Strategic Concept, "The Alliance's forces . . . contribute to the preservation of peace, to the safeguarding of common security interests of Alliance members, and to the maintenance of the security and stability of the Euro-Atlantic area. By deterring the use of NBC weapons, they contribute to

[6] For background, see David S. Yost, "New Approaches to Deterrence in Britain, France, and the United States," *International Affairs*, vol. 81 (January 2005), pp. 83-114.

Alliance efforts aimed at preventing the proliferation of these weapons and their delivery means."[7]

NATO's nuclear-weapon states and negative security assurances

Some workshop participants recommended that the Alliance's three nuclear-weapon states party to the NPT adopt legally binding negative security assurances (NSAs).[8]

Others replied that legally binding NSAs would be damaging to deterrence. Legally binding NSAs would constitute, as one put it, a "green light" for enemies to employ chemical and biological weapons with no risk of nuclear retaliation. No alternative deterrent threat, some workshop participants said, could be as potent as the threat to employ nuclear weapons. One workshop participant described NSAs as "rhetoric" and "atmospherics" and expressed doubt as to whether a government would hesitate to use nuclear weapons to defend its interests because of "the fact that it had said something in a distant place."

U.S. "Prompt Global Strike" capabilities as a deterrent

The U.S. Department of Defense recently failed to obtain congressional approval for its proposal to equip some Trident sea-launched ballistic missiles with precision non-nuclear warheads as part of a non-nuclear "Prompt Global Strike" capability that could support deterrence and defence objectives. The Pentagon nonetheless continues to seek congressional support for such a capability.

A workshop participant asked whether there was a risk that the launch of such a missile could be confused with a nuclear attack. The reply was that Russia is the only country that could detect and track such

---

[7] North Atlantic Council, Strategic Concept, 24 April 1999, paragraph 41.

[8] NSAs are the promises, subject to certain conditions, by the five NPT-recognized nuclear-weapon states not to use or threaten to use nuclear weapons against non-nuclear-weapon states party to the NPT. France, the United Kingdom, and the United States have all expressed caveats concerning their NSAs. For background on the security implications of NSAs, see Joseph F. Pilat, "Reassessing Security Assurances in a Unipolar World," *The Washington Quarterly*, vol. 28 (Spring 2005), pp. 159-170.

a missile launch. Russia could predict the trajectory and aim point of the missile and rapidly determine that it was not threatened, and the United States could organize the launch geometry to minimize any risk of misinterpretation by Russia. Moreover, the United States has direct communications links with Russia. If Congress approved the development of "Prompt Global Strike" capabilities, detailed procedures for launch notification could be worked out with Russia. At any rate, it should be obvious that the United States would not start a war with Russia by launching only one or two or even five missiles.

One workshop participant expressed doubt about the gravity of the risk of misinterpretation and called it "far-fetched," but nonetheless saw no need for the new capability. One workshop participant said that the term "Prompt Global Strike" is "scary," and some added that the term and the capability could be counterproductive by persuading some countries that they need nuclear weapons for their own security.

Conclusion: Follow-up work required

The workshop noted but did not fully address the following issues, which deserve more attention: nuclear terrorism, strategy for the 2010 NPT Review Conference, and the need for improved Alliance cooperation with respect to these issues and others.

For example, workshop participants agreed that strategies of dissuasion — persuading potential adversaries not to acquire nuclear weapons — would clearly be preferable to relying on deterrence and defence. No ideas about how to achieve dissuasive effects were discussed, however. The Allies need to anticipate issues affecting their interests at the 2010 NPT Review Conference and prepare accordingly for the deliberations. The issues extend beyond Articles IV and VI of the NPT to encompass how the future of the NPT-centered non-proliferation regime could affect the three NATO nuclear-weapon states and the security of the Alliance as a whole.

THE NPT AND ITS SIX ATTRIBUTES

William WALKER[1]

The American jurist Oliver Wendell Holmes, Jr. wrote in 1919 that the US Constitution "is an experiment, as all life is an experiment".[2] The same could be said of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). But what exactly has been the experiment that is the NPT, and how can and should its success be assessed? Where do these questions and their answers lead us when contemplating the Treaty's future?

The NPT possessed six attributes at its foundation and during its first quarter century. Firstly and most obviously, it was the text of an international treaty negotiated in the mid- to late-1960s. Its stated purpose was to stem, under international law, the spread of nuclear weapons. The Treaty obliged its Parties to respect certain principles and norms and to adhere to certain rules of behaviour, and its Parties established a verification system and review process.

Secondly, the NPT amounted to a pragmatic political settlement among the nuclear-weapon states (NWS), among the NWS and non-nuclear weapon states (NNWS), and among NNWS. Through its two famous bargains, it reconciled the majority of states (conditionally) to the temporary possession of nuclear weapons by an identified set of great powers, and it reconciled states (again conditionally) to the diffusion of nuclear technologies and materials for peaceful purposes. The non-

[1] Professor of International Relations, University of St Andrews.
[2] His dissenting opinion in *Abrams v. United States*, US Supreme Court, is quoted in Louis Menand, *The Metaphysical Club: A Story of Ideas in America* (New York: Farrar, Straus and Giroux, 2001), p. 430.

proliferation norm, not just the Treaty, attained international legitimacy by these means.

Thirdly, it was a political strategy, pursued especially by the US, designed to draw the bulk of states into permanent renunciation of nuclear weapons, and to create confidence that others would not follow the path to armament. In essence, the NPT was a political and diplomatic alternative to preventive war, albeit an alternative that was buttressed in some regions by extended deterrence and thus by the threat of war against nuclear-armed opponents. At root, both non-proliferation and nuclear deterrence were strategies of containment. NSC-68 and the NPT were thus bedfellows despite their apparent irreconcilability.[3] They sought restraint until the sources of conflict and armament could be addressed.

Fourthly, the NPT provided a developmental framework. It was the central carrier of norms and rules upon which other treaties and instruments could be established, and to which other treaties and agreements could be linked. More than that, it represented a commitment to develop the institutions of bilateral and multilateral arms control, and it provided a set of tools for cooperative problem-solving (whose worth would be demonstrated, for instance, during the political and military reconstruction of a nuclear superpower, the Soviet Union, after 1991).

Fifthly, the NPT represented a certain style of international politics, and a certain manner of addressing and finding solutions to the problems of international order. Without obviating the need for power balancing and coercion, at its heart lay the notion of reciprocal obligation – that states had responsibilities towards one another whatever their power and status, and that they were obliged to act for the common good as well as in the national interest.

Lastly, the NPT was an expression of hope and belief in the possibility of progress through arms control and disarmament, in the achievability of a common trust, and in the attainability of a more just international order. If that was too idealistic, it expressed at minimum a

[3] NSC-68 was the seminal document that set out the strategy for the containment of communism and the Soviet Union. 'United States Objectives and Programs for National Security', National Security Council, Washington, DC, 14 April 1950.

belief that this approach to international security and this devotion to international constitutionalism provided the least unreliable way of avoiding the spread of nuclear weapons and the occurrence of war.

During the early to mid-1990s, the NPT appeared to grow stronger in each of these six respects. Its membership expanded, it became more ambitious in its quests for universality and for arms reductions and disarmament, and it bore witness to the desire in most capitals for deepening investment in a cooperative, law-based approach to international politics. Despite some clouds in the sky, the experiment seemed to be passing all tests of worth. Furthermore, the NPT appeared to be acquiring new qualities as an international institution. In particular, its quinquennial Review Conference began to act as a quasi-legislative assembly setting agendas (including agreement on the Principles and Objectives of 1995 and Thirteen Steps of 2000) and holding states Parties to account. This was tantamount to an assertion that the collective of NPT states Parties possessed a sovereign authority superior to that of individual Parties, including the NWS.

Judgements of the NPT's condition should therefore rest on more than empirical observations of trends in membership, compliance, and non-compliance, essential though those measures are. Such judgements also depend on what the NPT is taken to be — just international law, or a political strategy, a developmental framework, and a style of politics.

In the mid-1990s, the common opinion was that the NPT was succeeding beyond expectations in every respect. Indeed, for India and a few other states it was becoming too successful. By the late 1990s, however, it was beginning to be talked about as a troubled treaty, and today it is often described as a failing or even a failed treaty. But what do such negative judgements mean, and for whom?

They obviously refer to instances of non-compliance and the inability to find and agree upon appropriate international responses, whether in regard to Iraq, North Korea or Iran. They refer to the shortcomings revealed in the International Atomic Energy Agency (IAEA) safeguards system, export controls, and the UN Security Council. They also refer to the inability to bring India, Israel, and Pakistan into the

NPT as NNWS, let alone to prevent India and Pakistan from crossing the threshold into nuclear armament or North Korea from leaving the Treaty. By any empirical measure of weapon proliferation, the situation is worse today than a decade ago.

Such negative judgements also suggest insufficiency. The NPT was designed to deal with a security environment marked by inter-state conflict and risks of devastating war between opposing powers and alliances. It was becoming less appropriate, it was claimed, to an environment in which the main threat was coming from "rogue actors" in the guise of terrorists, insurgents, and their state supporters — actors which did not respect international society's norms and rules and which had access to an increasing range of technologies which could be put to lethal purpose.

Negative assessments of the NPT have also arisen from trends in, and the particular judgements of, the United States. Emerging as the unquestioned hegemon, the US government chose to alter its attitude towards and relationship with a treaty which had been its child in so many respects. It continued to acknowledge its legal existence and insisted on states' obligations to comply with its provisions. Especially after 2001, however, it no longer displayed much respect for the other five attributes of the NPT mentioned above. It offered opinions that the political settlement underpinning the NPT had little relevance in the post-Cold War environment; the strategy of containment that the NPT (and nuclear deterrence) represented was insufficient or useless, depending on context; the NPT no longer provided a developmental framework appropriate to the time and the national interest; the Treaty represented a cooperative style of international politics that had not delivered security and was becoming uncongenial; and its embodiment of ideas of progress, trust, and justice was disingenuous and inappropriate to the irrationality and incivility of the age. Furthermore, the NPT Conference had overreached itself: the US government was not obliged to honour its decisions, nor to respect the solemn commitments made by previous US administrations, as the Conference did not possess superior authority and its decisions were 'contingent'.

Instead, as we know, the US government embarked in the late 1990s and early 2000s on a very different political and security strategy and adopted an irreverent attitude towards international constitutionalism that extended into many other fields (including the environment). It led to the US government's reduction of the problem of international nuclear order to the problem of proliferation, assertion of the primacy of counter-proliferation and preventive action, and advocacy of solutions to proliferation founded on regime change and democratisation. Furthermore, it was assumed that past rivalry with great powers (notably Russia and China) could be set aside as they were bound to cooperate in pursuit of common economic and security interests and to bandwagon when faced with unchallengeable American power. Hegemony negated the security dilemma and thus the need for nuclear arms control.

This novel American strategy was even more of an experiment – to the extent of being a gamble — than the NPT and the multilateralism that it embodied. For it relied heavily on the United States' power and authority and on its ability to establish, through the demonstration of achievement, the legitimacy of its unilateral behaviour. Six years after it was launched, this strategy cannot be considered a success, whether viewed from inside or outside the US, for reasons that are now familiar. As a result, we find ourselves in an unhappy situation, tossed between on the one hand an NPT system that has suffered significant damage from acts of non-compliance, revelations of instrumental weakness, and the dishonour shown towards it, and on the other hand a revisionist American approach that has provided few remedies, has been short of both legality and legitimacy, and has aggravated more than it has alleviated the problems of nuclear order. In addition, the United States has wounded its own international authority and is probably headed for a period of confusion over the future character and direction of its international strategy.

In my view, salvation is unlikely to come *just* by identifying weaknesses in non-proliferation or counter-proliferation policies and applying sticking plasters to them. Some prior questions need to be asked. What style of international politics and what kind of international strategy are likely to be most effective (or least ineffective) and to carry greatest legitimacy (or least illegitimacy)? Can and should containment be

reinstated as the foundational principle informing political strategy? Can an international nuclear order that merits that title survive without the NPT or without an NPT-like vessel of primary norms and rules, and without the NPT's bargains? Can the non-proliferation norm survive if nuclear-armed states dishonour arms control and disarmament norms? My answer to the last two questions is a definite no.

We should recall that the NPT emerged in the 1960s out of decisions by both nuclear-armed and unarmed states to be pragmatic after a time of great danger and crisis. It was accepted that there had to be cooperation among competing states for survival and problem-solving; there had to be convergence on primary norms and rules; ways had to be found to enable deterrence and non-proliferation to coexist; and the threat of violence was not an appropriate response to weapon proliferation except *in extremis*. Similar conclusions might be drawn today after another period of danger, crisis, and error. There are also today contextual similarities to the 1960s, despite obvious differences: the need to manage an expansion of civil nuclear commerce, the probable return to the fore of political and strategic rivalry among great powers (with incipient risks of arms racing), and the need again to draw a firm line after a bout of proliferation around the states that are granted title, if reluctantly, to temporary possession of nuclear weapons.

If my depiction of the NPT is correct, it follows that the Treaty would be reinvigorated if its six attributes (not just the first) were acknowledged and respected, especially if not only in Washington. Perceptions of the Treaty's condition might change substantially if a new US Congress and administration adopted a more positive attitude towards it. Perhaps the shift has already begun.

However, this is unlikely to be sufficient. It is informative to ask a "what if" question. What if a decision had been taken in 1995 to extend the NPT's lifetime for a further 25 years, and no more? Would this decision already be compelling a discussion of the NPT's replacement – of negotiating a new treaty which would act as the central vessel carrying the principles, norms, and rules pertaining to nuclear weapons? How might such a treaty bring together existing agreements, understandings, and proposals from *inter alia* the NPT and its Conferences, UNSC

Resolution 1540, and developments in safeguards, export controls, and physical protection? What novel features might be incorporated? How might the Article IV and Article VI bargains be refashioned to gain afresh the allegiance of non-nuclear weapon states? Or would states choose to go down another path – avoiding negotiation of a new treaty but seeking some other way (what way?) of binding the international nuclear order together?

These questions deserve attention, even if the compulsion to replace the NPT is absent, and even if there are risks in opening debates about its replacement when no replacement is likely to be feasible. Starting from where we are, how might the next experiment be imagined and – just possibly – initiated? If it is concluded that there is no alternative to the NPT in its inherited form, how can it be given fresh meaning and vitality?

POLITICAL REQUIREMENTS TO FULFILL THE NON-PROLIFERATION AND DISARMAMENT BARGAIN

Paul WILKE[1]

Do we have a crisis within the system, or of the system? This challenging question was raised by William Walker at a Wilton Park conference on the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) held late in 2005. The preliminary answer I came up with was that, whatever the outcome of this turbulent time in the field of nuclear non-proliferation and disarmament, it will be an extension of the present system. Therefore, without denying that we are facing a crisis, it would be better to see our present time in terms of a paradigm shift. We are moving swiftly from one belief system to another, as a rapid modulation on a much steadier institutional and military reality. Before we can move ahead and define the political requirements to meet the non-proliferation and disarmament bargain, we need to find terra firma again in a consistent appraisal of where the old paradigm was lacking and what a new one should consist of. This will be as much an exercise in accommodating existing realities into a new belief system as in changing reality itself.

The old paradigm is best exemplified by the outcomes of the NPT Review Conferences of 1995 and 2000, respectively the Principles and Objectives and the Final Document with the famous 13 steps. It consisted of carefully balanced combinations of requirements flowing mainly from Articles II and VI of the NPT. The 2000 Review Conference may have been successful in that it produced an outcome, but we should remember how much of a cliff hanger that Conference actually was.

[1] Former Head, Nuclear Affairs and Non-Proliferation Division, Department of Security Policy, Ministry of Foreign Affairs, The Hague. The views expressed are personal.

Already at that moment the old paradigm was unravelling. In October 1999 the US Senate had voted down ratification of the Comprehensive Test Ban Treaty (CTBT). The Iraq issue held the Conference hostage to the very last moment. Brinkmanship saved the conference but could not prevent highlighting the fact that the old paradigm was getting worn. So where is it fraying?

The old paradigm suffers from (at least) the following inconsistencies or anomalies

Logical: There are three nuclear-capable states outside the NPT, of which one or more are still building up their arsenals. How can any meaningful discussion on nuclear disarmament take place within the framework of the NPT when these three countries are not present at the table?

Ideological: The ideological distress of the NPT flows from two distinct but very different sources that complement and reinforce each other. Treaty-based disarmament and non-proliferation are founded on the conviction that international law should guide the conduct of and between nations, and that some limitation of national sovereignty is the price to be paid for all the good this can produce. At least one major partner to the NPT shows a diminution of this essential conviction. The other source of ideological distress is the discriminatory character of the NPT. Within a developing world, more and more countries will challenge the old divide for want of objective criteria.

Historical: Closely related to the ideological strain is the fact that the NPT froze a situation in time that existed briefly during the second half of the last century. The fact that India was not allowed into the NPT as a nuclear weapon state would be seen from Mars as an artifact of history. The old paradigm wished this unwelcome truth away. This has led over the years to ritualistic calls on India to join the NPT as a non-nuclear weapon state, with the ritualistic answer that it would be prepared to do so if all nuclear weapon states were to abolish their arsenals. Now that India's economy is growing at a rate of almost 10 per cent per year, it will need access to nuclear energy technology and the historical anomaly can no longer be maintained.

Political: Ideological and historical inconsistencies can be accommodated politically as long as the discriminatory arrangements of the NPT are deemed to contribute to national security needs. The NPT was based on strong Cold War interdependencies in security matters. Nuclear sharing, nuclear umbrellas and influence spheres made this discriminatory arrangement possible. Re-alignment of strategic partnerships and the development of new threats make some countries reconsider the value of this discriminating arrangement for their national security.

Fact 1: It has come to light that Iraq, North Korea, Libya, and Iran had or still have nuclear programmes in contravention of their Article II responsibilities. Besides the disturbing nature of these facts themselves, it furthermore showed shortcomings in International Atomic Energy Agency (IAEA) full scope safeguards to detect, deter or prevent clandestine nuclear programmes.

Fact 2: The UK and France are facing political decisions on modernization of their nuclear arsenals. They might wish to develop strategic reasons for justifying huge future financial outlays by increasing the salience of nuclear weapons. Russia relies heavily on nuclear deterrence because of conventional weaknesses and Moscow is modernizing its nuclear forces. China is also modernizing its nuclear forces but is not transparent about its plans. The US has defined military challenges (biological and chemical weapons, and buried facilities) that can only be met by non-conventional means. As noted earlier, there are three nuclear capable states outside the NPT and they may well be still expanding their forces.

In order to meet the political requirements to fulfil the non proliferation and disarmament bargain, we need to deal with these inconsistencies, one by one, and find pragmatic and politically realistic solutions to each of them before we can move ahead. That seems quite a challenge, and pretending to have a clear outline of what should lie ahead would be presumptuous.

Orientations for the future debate

1- A premise for fulfilling the NPT bargain is a full return to the conviction that peaceful relations between states require the development of international law. Furthermore, it must be agreed that international law can be successfully enforced by credible international verification mechanisms. Experience (Iraq and Iran) has shown that verification by international inspection mechanisms can produce credible outcomes that surpass the results of national investigative means. Likeminded countries agree on this point, but the issue is how to get this point across where it really matters. In the end, we will have to rely on domestic political forces in the countries concerned to change prevailing political attitudes.

2- In order to deal with the logical inconsistency of the old paradigm, we will have to develop an inclusive forum for NPT and non-NPT states alike to meet on matters related to nuclear non-proliferation and disarmament. We have such a forum, the Conference on Disarmament in Geneva, but it has been underutilized over the past decade. The inclusive issue it should start negotiating was identified years ago: a verifiable Fissile Material Cut-Off Treaty (FMCT). This could only happen if the major powers decided it was in their interest to do so. In view of fact 2, this is unlikely for the moment.

3- Given the improbability of the first two suggestions materializing within the next 1,000 or so days, we have to concentrate on facts 1 and 2. The verification possibilities of the IAEA will have to be enhanced. Violators of the NPT will have to be dealt with. To put some weight on the other end of the scale, strong resistance ought to be given to attempts to increase the salience of nuclear weapons. It is a political requirement for the nuclear-weapon states to fulfil the bargain that they diminish as much as possible the military usefulness of nuclear weapons, and continue to define them as purely political weapons of last resort.

4- We have to address the historical anomaly of India. However, doing so will increasingly raise the issue of dealing with Pakistan and Israel. It may also lead to further antagonizing countries that already have

fundamental difficulties with the present discriminatory regime. The best solution here again would be to have a verifiable FMCT, which would place all nuclear installations under full scope IAEA safeguards, regardless of their location.

Conclusion

Nuclear weapons are exceptional weapons which have required an exceptional kind of politics. While certain states have acquired nuclear weapons for their own political and security reasons, it has always been understood that intensive international cooperation and a commitment to the rule of law are of mutual interest to all countries in all categories within and outside the NPT. Thus, while the security challenges may have changed, we must retain our commitment to these exceptional cooperative politics. There are some tough issues ahead of us that will require timely action to be taken. It is therefore imperative to hang on to the political approach that we have developed over so many years. Otherwise, we will indeed face a crisis of the system itself.

For political reasons, the NPT cannot be amended, even as times have moved on. The belief system that found its roots in this treaty is in crisis now; a paradigm shift is taking place that could potentially destroy the treaty. At the core of the issue are international law and its effective implementation. The basic political requirement to fulfil the bargain of the NPT is therefore a restoration of the international consensus that we can and must achieve nuclear non-proliferation and disarmament by means of inclusive negotiations, and that we can translate the results into binding international law. Only if this premise is fulfilled can we move on to build upon the basis of the NPT an effectively verifiable Fissile Material Cut-Off Treaty as an essential first step towards the development of a new paradigm.

THE NON-PROLIFERATION TREATY IN CRISIS

Michael RÜHLE[1]

Introduction: A Treaty in Crisis

Among the few things that arms control "hawks" and "doves" agree on is the precarious state of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The withdrawal of North Korea in 2003, the frustrating attempts to halt Iran's uranium enrichment programme, and most recently the US-India nuclear deal allow for no other conclusion than that the NPT and the regime it underpins have been damaged – perhaps even beyond repair.

When it comes to the causes for the current malaise, however, the commonality between hawks and doves quickly vanishes. Indeed, their views on who is to blame for the NPT's crisis are almost diametrically opposed.

For the liberal arms control community the case is clear. In their view, the root cause of the present crisis is the unwillingness of the nuclear weapon states to live up to their part of the NPT bargain and commit to real disarmament. According to this school of thought, the selfish and contradictory policies of the nuclear-weapon states (NWS) have created a web of double standards that make dealing with the (few) violators particularly difficult. In the view of this school, only a fundamental change of the NWS' policies offers a chance to repair the damaged non-proliferation regime.[2]

---

[1] Policy Planning Unit of the NATO Secretary General. The views expressed are personal.
[2] See William Walker, "Weapons of Mass Destruction and International Order", *Adelphi Paper*, 370 (London: International Institute for Strategic Studies, 2004).

This school has many adherents, yet it fails to capture the true causes of the weakening of the Non-Proliferation Treaty. The crisis of the NPT is due to many causes, with the failure of the NWS to adhere to their Article VI commitments being just one, and not the most important one. If the NPT is in jeopardy, it is mainly due to three major factors:

First, structural weaknesses that burdened the NPT from its very beginning have progressively gained in salience and are now undermining some of the key tenets of the regime. Second, new developments in international security tend to invalidate many of the traditional assumptions underlying the NPT, and are pushing other non-proliferation strategies to the fore. Finally, the increasing demand for fossil energy tends to override the non-proliferation norm and paralyses the UN Security Council in maintaining the integrity of the non-proliferation regime. Each of these three factors is examined in more detail below.[3]

Structural Weaknesses of the Non-Proliferation Treaty

Given the fact that the NPT now has almost 190 parties, one might be tempted to conclude that the Treaty has been transformed from a mere legal document into a truly global moral norm. However, the Treaty's inherent structural dilemmas have progressively been exposed. For example, the Treaty's most fundamental challenge, namely to codify the inequality between the nuclear "haves" and "have-nots", could only be met by emphasising the NPT's limited duration. However, this constructive ambiguity was done away with by the Treaty's indefinite extension in 1995, which reinforced rather than ameliorated the built-in tensions of the arrangement.

The NWS' rather general commitment to disarmament (Article VI) constitutes another structural feature of the NPT that was bound to lead to a crisis of the NPT bargain. Arguably, the NWS regarded this commitment as a price they had to pay in order to get the non-nuclear-weapon states (NNWS) on board. However, it was a foregone conclusion that, sooner or later, the latter group would insist that the NWS live up to

[3] For a more extensive treatment see Michael Rühle, "Order and Disorder in the Second Nuclear Age", *Internationale Politik – Transatlantic Edition*, Vol. 7, No. 4, Fall 2006.

their disarmament commitments. In recent years, the mounting frustrations voiced by the NNWS, in particularly some non-aligned countries, have served as a pretext for some of them to oppose tougher measures against proliferators.

The most worrisome structural weakness of the NPT from today's vantage point, however, might well be its energy dimension. Crafted in a period of euphoria about the blessings of nuclear energy, the NPT sought to prevent military proliferation by fostering civilian nuclear proliferation. However, since civil and military nuclear technologies are almost indistinguishable, the Treaty in effect allows a country to develop its civilian nuclear programme right to the threshold of having military applications. Only the final steps to produce nuclear weapons are prohibited – steps that a determined regime could take promptly after its withdrawal from the Treaty.[4] This very scenario now appears to be coming true in Iran.

New developments in international security

As long as the bipolar framework of the Cold War dominated international politics, these structural problems of the NPT did not matter much. However, the end of the Cold War removed the specific political and military context in which nuclear weapons had contributed to mutual deterrence and restraint. The lack of new nuclear rules, together with an ever-accelerating process of globalisation, has sparked various new developments that reinforce the built-in structural problems of the NPT bargain and create new challenges for the traditional non-proliferation regime.

The implicit US nuclear threat against any chemical weapons use by Iraq against coalition forces in the 1991 Gulf War invalidated the notion of regarding nuclear weapons as an entirely separate WMD category. Since the US and other NWS had to assume that future enemies might be equipped with chemical and biological weapons, nuclear weapons were needed to deter any WMD use. Predictably, this stance continues to be criticised as compromising the logic of negative security

[4] See Albert Wohlstetter, "Spreading the Bomb without Quite Breaking the Rules", *Foreign Policy*, No. 25, Winter 1976-77.

assurances, according to which no NWS can threaten a NNWS with nuclear weapons.

The discovery of Iraq's secret nuclear programme immediately after the 1990-1991 Gulf War revealed a massive verification failure. The resulting lack of trust in the NPT's verification clauses in general and the IAEA's abilities in particular could never be overcome. Neither in North Korea nor in Iran could the IAEA demonstrate convincingly that it was abreast of the situation, and able to take effective action.

In 1993, North Korea's nuclear ambitions could only be contained through massive US political and military pressure, yet with little international support. In 1998, the nuclear tests by India and Pakistan raised questions of how to discourage non-NPT members from seeking nuclear weapons, but also how to bring wayward outsiders into the NPT. That same year, the withdrawal of the UN Special Commission (UNSCOM) from Iraq and North Korea's missile tests further underscored the limits of traditional multilateral approaches to non-proliferation.[5]

The terrorist attacks against the United States on 11 September 2001 gave the non-proliferation question a new sense of urgency and dramatically decreased US tolerance vis-à-vis proliferating states ("axis of evil"). The attacks also raised the spectre of terrorist non-state actors armed with WMD, thereby creating a new challenge for the inter-state nature of the NPT-regime and invalidating many assumptions of rationality and restraint that were considered central to dealing with the nuclear reality. Finally, the debate on a possible "Talibanisation" of Pakistan raised the spectre of a fundamentalist nuclear power emerging literally overnight.

The uncovering of the A.Q. Khan network in early 2004 invalidated yet another widely shared assumption on which the classical NPT regime was based: the dependence of would-be nuclear powers on support by traditional NWS. Khan's network had supplied Iran, Libya and several other states with technology and know-how. It thus

[5] Nor did North Korea's definitive withdrawal from the NPT in 2003 have any major international consequences.

underscored the danger posed by “second-tier proliferation”: an acceleration of the spread of nuclear weapons, and thus more "turnkey states" that are able to rapidly convert their civilian nuclear programme into a military one.

Finally, Iran’s insistence on its “legitimate” right to enrich uranium, irrespective of its dubious track record, has revealed a serious gap in the legal framework of the NPT. Thus, effective UN Security Council (UNSC) action is only possible if one adopts a broad interpretation of the NPT, going beyond its specific wording and emphasising its norm-setting intent. How far such an extensive interpretation can be agreed, however, and whether it can be sustained in the longer term, remains to be seen.

The Energy Paradox

The NPT’s structural problems and new security challenges make it clear that mere tinkering with the wording of some of the NPT’s provisions will not suffice to restore the integrity of the damaged regime. That task will rather fall to the UNSC as the ultimate arbiter of the NPT. However, the five permanent UNSC members are nuclear-weapon states and thus vulnerable to charges of double standards. This is particularly clear with respect to the United States – the *de facto* trustee of the NPT regime –which has clearly suffered from a loss of moral authority, notably because of the Iraq war.

The major problem for the UNSC, however, is a phenomenon that one may term the “economisation” of security policy. Simply put, if a proliferator also happens to be a major energy supplier or is valuable for other reasons, the non-proliferation norm may be superseded by energy or geopolitical considerations. The case of Iran is most instructive in this regard. What can be observed here is a reversal of the NPT’s original energy bargain. Instead of helping a NNWS to cope with its nuclear energy needs, it appears that some UNSC members’ own fossil energy needs may lead them to accept a country’s nuclear-weapon status in order to retain access to that country’s fossil fuel.

Arguably, the US-India case follows a similar logic of tradeoffs. Given the need to cope with shifting geopolitical realities in Asia, a closer relationship with India becomes a political imperative, even if this may run counter to non-proliferation orthodoxy.[6] Both cases are not exceptions, but are likely to become the rule. Even long before the US-India deal, Pakistan's crucial role in the war against terror constituted a case where non-proliferation concerns could not be allowed to dominate the agenda. In short, non-proliferation interests are now competing against other vital concerns – and, in some cases, risk losing out.

The Way Ahead

Upholding the formal non-proliferation regime remains a major NATO interest, for only this regime offers a framework for identifying and sanctioning unwanted behaviour. However, there is little hope that the system could be stabilised by reforms. For despite the success of US and British diplomacy in talking Libya out of its nuclear programme, powerful trends are working against the non-proliferation principle.

Clearly, the UNSC remains the focal point for maintaining what is left of the regime's integrity, for example by forcing violators back into the regime. To do so, however, would require the UNSC to take action in ways that go beyond the Treaty itself. Indeed, in the opinion of this author, the US and European Union stance vis-à-vis Iran, which wants Tehran to suspend enrichment due to its past suspicious behaviour, is already *de facto* outside the Treaty's remit.[7]

Arguably, there already exists a far-reaching legal basis for taking robust action against proliferators: The 1992 UN Security Council Presidential Statement in conjunction with UNSCR 1540 of 2004 offers considerable leeway, even more so as these declarations appear to apply even to non-NPT countries. Indeed, one could argue that the UNSC's ultimatum to Iran in the summer of 2006 to stop its enrichment activities

[6] Although India has not adhered to the NPT, it appears to have a solid non-proliferation record.
[7] The EU's line of argument proceeds from the assumption that the right to enrich uranium (widely assumed to reside in Article IV) is inseparably connected with Articles I and II. Moreover, according to the EU's approach, the issue is for Iran to re-build the trust it has lost through its cheating, rather than giving up enrichment for good.

represents more than a broad interpretation of the NPT but constitutes a new, more assertive approach in dealing with proliferators.

Such a tougher stance should be complemented effectively by more robust forms of action against proliferators, such as the Proliferation Security Initiative (PSI). In addition to its operational achievements, as in the case of Libya, the significance of the PSI is essentially political. In acknowledging the need for a more pro-active and coercive approach, the PSI highlights the importance of the "denial" aspect of non-proliferation, thus sending a strong signal of resolve to would-be proliferators.

Finally, one can expect more creative (and controversial) approaches to get outsiders into the regime. The US-India agreement, which gives New Delhi access to civilian nuclear technology and fuel, yet at the same time makes it more difficult to transfer it to others, is one possible approach to realigning classical non-proliferation principles with new and compelling geopolitical requirements. Hence, it is not without reason that the director of the IAEA has welcomed the agreement.[8]

Conclusion

In sum, the image of the NPT as a set of norms that transcend national interests is increasingly being revealed as a myth. The regime was and remains highly dependent on – and vulnerable to – specific political and economic developments. Thus, the NPT is unlikely to retain the centre stage role that it has occupied for so long. Political and economic constellations will become far more important for the future of non-proliferation than the specific legal framework.

Clearly, upholding the formal non-proliferation regime remains a major interest of all NATO Allies, for only this regime offers the framework for identifying and sanctioning unwanted behaviour. Without a more assertive UN Security Council, however, hopes for a reinvigoration of the NPT will remain elusive.

---

[8] Mohamed El Baradei, "Rethinking Nuclear Safeguards", *The Washington Post*, 14 June 2006, p. A23.

THE FUTURE OF THE NPT: A PROGNOSIS

Martin BRIENS[1]

There have been in the past many dark predictions about a proliferated world, a world with more nuclear-capable and nuclear-armed nations, in the context of a weakening, and even a collapse, of the Treaty on the Non-proliferation of Nuclear Weapons (NPT). The threat of nuclear terrorism makes this prospect even more ominous.

This dark nuclear future is indeed a possibility, but one that we can still prevent from happening. The worst is never certain. President Kennedy said in 1963, that there could be as many as twenty-five nuclear-armed countries by 1980.[2] It did not happen. Of course, circumstances have changed, and drivers of security and insecurity as well. But a weakening of the NPT would be more a symptom, and a consequence, of a proliferated world, than a reason for it. What will matter most in the coming years will be our willingness and ability to tackle this challenge and to foster collective security.

This paper briefly reviews the health status of the NPT before considering the short- and long-term prospects for the non-proliferation regime and possible ways to prevent bad omens from becoming sad realities.

---

[1] Deputy Director, Centre d'Analyse et de Prévision, Ministry of Foreign Affairs, Paris. The views expressed are personal.

[2] "I am haunted by the feeling that by 1970, unless we are successful, there may be 10 nuclear powers instead of four, and by 1975, 15 or 20. . . I see the possibility in the 1970s of the President of the United States having to face a world in which 15 or 20 or 25 nations may have these weapons.", President John F. Kennedy's press conference of 21 March 1963, text available at www.jfklibrary.org.

What is the health status of the NPT today?

In 1995, the indefinite extension of the Treaty resulted in a sense of optimism, which was in synch with the broader sense of optimism following the end of the Cold War. It showed also the extent to which all the members felt that the Treaty, despite some weaknesses, was beneficial to them.

As much as the broader context, the prospects for the NPT, ten years later, look bleaker.

If some nations have joined the NPT since 1995, namely Brazil and Cuba (the NPT is now one of the most universal treaties in the world), the three remaining holdouts are not any closer to joining it. Quite the contrary. Not only did India and Pakistan display their nuclear capabilities in their tests in 1998, but also India is close to getting a new status, thanks to its nuclear agreement with the United States.

Much worse was the declared withdrawal of the Democratic People's Republic of Korea from the NPT in January 2003. An aggravating factor was the total absence of reaction from the United Nations Security Council (UNSC), focused at that time on Iraq. Today, legal uncertainties remain on its status in relation to the NPT. Yet North Korea has kept on blatantly challenging the NPT, including by apparently detonating a nuclear device on 9 October 2006.

Iran is a subtler and less direct but perhaps deadlier challenge to the Treaty. After a couple of years of investigation by the IAEA, and two agreements broken by Iran after a few months, Iran was found in September 2005 in non-compliance with its safeguards agreement by the Board of Governors of the IAEA. Iran asserts that it wants to pursue an enrichment programme even if there is no economic justification for this programme, and in the context of a very active missile programme. There are two main risks associated with this programme: first, Iran may pursue clandestine activities; second, Iran may acquire "break-out" capabilities (sensitive fuel cycle technologies such as enrichment and/or reprocessing) under the cover of a legitimate programme.

Prospects for the short-term: recovery, status quo or worsening of the patient's condition?

There are two ways to interpret the current state of the non-proliferation regime. The glass half-full: the darkest predictions of the past have proven wrong. These are only two hard cases left, Iran and North Korea. The glass half empty: North Korea's announced withdrawal has dealt a severe blow to the NPT, the consensus supporting it is eroding, and failing to solve Iran in a proper way would lead to the unraveling of the Treaty and more broadly of the non-proliferation regime.

A collapse of the NPT would not happen overnight. Most countries, without any nuclear capabilities, will still attach the utmost importance to the Treaty, whatever happens. Developing a nuclear programme requires time, skills, and resources, especially if a country's goal is to acquire break-out capabilities rather than to conduct riskier clandestine activities. One scenario for the future could actually be one in which several nations in a given region would acquire over the years sensitive fuel cycle technologies under the cover of the NPT, leading to latent or virtual proliferation in the region. Should a crisis break out, they could then withdraw from the NPT and obtain nuclear weapons in a much shorter time than would otherwise be possible. Proliferation would then become real instead of virtual.

The prospect is more of an erosion than a sudden collapse of the non-proliferation regime.

In the short term, the health of the NPT will hinge upon the way we deal with the North Korean and Iranian challenges. The UNSC adopted Resolution 1718 in the wake of the North Korean nuclear test on 9 October 2006. It is important for the credibility of the Security Council and the non-proliferation regime to make sure that it is implemented. The initial agreement reached in the latest round of the six party talks is positive; the ultimate goal of the talks should remain the complete, verifiable, and irreversible termination of the North Korean nuclear-weapon programme.

After Iran did not comply with the UNSC request to suspend its uranium enrichment activities, negotiations started in the UNSC to adopt a first set of measures to encourage Iran to return to the negotiating table. The time has come to increase the pressure on the Iranian government, while simultaneously keeping the door to negotiations open, should Iran take the right decision and come back to full suspension of its enrichment and reprocessing related activities, as required by the international community.

Beyond these two hard cases, what longer-term factors might affect the future of the NPT ?

It seems obvious, but it is nonetheless useful to recall that the perception of security or insecurity will play a major role. Everything the international community does to resolve conflicts and to reduce regional tensions will improve some nations' sense of security and lessen their need for strategic hedging. This is of course especially true for the Middle East region. The second factor will be the future role of nuclear weapons in defence policies and the availability of possible strategic alternatives. There is no link between nuclear disarmament and non-proliferation. Iran and North Korea have developed their nuclear programmes even as the United States and Russia have drastically cut their arsenals. Countries might want to acquire nuclear weapons for many reasons (including perceptions of insecurity, ambitions to achieve major or regional power status, and/or fear of American conventional military capabilities), but probably not because of the pace of nuclear arms reductions in Russia and the US. Possible future arms reductions will follow their own pace, and will depend on the evolution of strategic stability between the US, Russia, and increasingly China.

A more interesting development is the emergence of possible strategic alternatives to nuclear weapons. Already, the 2001 US Nuclear Posture Review has led to the emergence of a new strategic triad, with the goal of giving more options to the American President to dissuade, deter, and defeat adversaries. This new triad encompasses offensive means, (including nuclear, conventional, and non-kinetic capabilities), defensive means, and a responsive nuclear infrastructure. It has often been portrayed as reducing the nuclear threshold, via the proposed

development of new nuclear-weapon systems, such as the Robust Nuclear Earth Penetrator (RNEP), which was in fact not authorized or funded by the US Congress. But the emphasis in this new triad is actually elsewhere, notably on advanced conventional capabilities, which can be employed to serve strategic purposes (with the Prompt Global Strike concept, for instance).

The question is what impact these new strategic capabilities will have on strategic stability. One could imagine, for example, that for a country like Japan, which has a bitter memory of nuclear weapons, a mix of advanced conventional strike options, missile defence capabilities, and space assets could represent a strategic alternative to acquiring nuclear weapons, an option which would bear a huge political cost. Of course, nuclear weapons will always remain special and hold a particular political and psychological value. Many countries would not be able to afford such non-nuclear capabilities, but they could represent an interesting alternative to nuclear weapons for some nations, together with strengthening their strategic alliances.

A third factor is the likely spread of nuclear power technology and capabilities, in order to address part of the world's growing energy needs. It is imperative to make sure that this development of nuclear energy is proliferation proof and environmentally safe. As far as non-proliferation is concerned, this means limiting access to the most sensitive fuel cycle technologies. The proposal to provide guarantees of supply of nuclear fuel that France and five other countries recently submitted to the IAEA Board of Governors is aimed at reconciling the development of the peaceful uses of nuclear power with non-proliferation, hence better implementing Articles III and IV of the NPT. The same vision is at the core of the Global Nuclear Energy Partnership, a project supported by France.

To conclude, what can be done now to prevent an erosion of the nuclear non-proliferation regime? As noted earlier, the most important factor will be the way we deal with the North Korean and Iranian challenges. But a lot can be done in the meantime to strengthen the regime: adopting new instruments such as a Fissile Material Cut-off Treaty at the Conference on Disarmament in Geneva; improving

verification mechanisms; implementing a mechanism of guarantee of supply of nuclear fuel; reinforcing operational cooperation in informal frameworks such as the Nuclear Suppliers Group and the Proliferation Security Initiative. But what will be needed the most will be, on the part of all nations, a collective will to address the non-proliferation challenge, and to find a way back to the effective collective security that was evident at the end of the Cold War in the broad coalition that successfully opposed Iraq's aggression against Kuwait in 1990-1991.

MEASURES NEEDED TO STRENGTHEN THE NUCEAR NON-PROLIFERATION REGIME

Pierre GOLDSCHMIDT[1]

The greater the number of states possessing nuclear weapons, the greater the risk that one day, by design or accident, they will be used or will fall into the hands of non-state actors with catastrophic consequences. We must therefore reject as irresponsible the idea that the international community should get used to the fact that sooner or later more countries will possess nuclear weapons, and that we can do nothing about it. Rather, it is essential to take all the necessary steps to "dissuade" and "deter" non-nuclear-weapon states (NNWS) from acquiring such weapons.

Dissuasion entails persuading a state (both the leaders and the people) that it is not in that state's best interest to acquire a nuclear-weapon capability. The most remarkable achievement in recent years has been the success of secret diplomacy in convincing Libya's leadership that abandoning its weapons of mass destruction (WMD) and missile programmes would increase the country's security and improve its economic development.

Dissuasion can mainly, if not exclusively, be achieved through bilateral and multilateral negotiations, in order to create the necessary geopolitical environment, including first of all appropriate security guarantees. To be most effective, persuasion efforts should be undertaken well in advance of any anticipated crisis.

---

[1] Visiting Scholar, Carnegie Endowment for International Peace, and former Deputy Director General and Head of the Department of Safeguards, International Atomic Energy Agency.

Deterrence plays its role when an NNWS cannot be persuaded that acquiring a nuclear-weapon capability is not in its best interest.

It is essential for any such state to know:

- First, that any undeclared nuclear-weapon programme has a high probability of early detection, and
- Second, that if detected, extremely negative consequences would be inevitable (and not simply possible).

Unfortunately, neither of these two deterrents is credibly in place today, and it is therefore essential to take the practical steps necessary to improve the situation.

For that, we need to draw on the lessons learned from previous nuclear proliferation crises.

Sensitive fuel cycle activities

In the wake of the 1990-1991 Gulf War, when it was discovered that Saddam Hussein had secretly been developing nuclear weapons at undeclared sites, the International Atomic Energy Agency (IAEA) passed the 1997 "Model Additional Protocol," designed to enable the Agency to confirm that there are no undeclared nuclear materials and activities in an NNWS. To date, however, some 20 NNWS with known nuclear activities have no Additional Protocol in force, including at least three — Argentina, Brazil, and Iran— that are known to have uranium enrichment activities.

The international community should demand much more forcefully that such states sign and ratify the Additional Protocol, and the IAEA should mention them explicitly in its annual report.

The Nuclear Suppliers Group (NSG) could also play a significant role in this respect by adopting a rule that no nuclear material, equipment, and know-how would be transferred to any country having conversion, enrichment, or reprocessing activities unless they have an Additional

Protocol in force and unless these and all other nuclear facilities are covered by an INFCIRC/66-type safeguards agreement[2].

Non-compliance

If a state has been found by the IAEA to be in non-compliance with its safeguards undertakings, experience with both North Korea and Iran has shown that, in order to conclude in a timely manner that there is no undeclared nuclear material and activities in the state as a whole, the Agency needs verification rights extending beyond those of the Comprehensive Safeguards Agreement and Additional Protocol.

This appears clearly from the Director General's report of 28 April 2006 to the IAEA Board of Governors, in which it is stated that "*the Agency is unable to make progress in its efforts to provide assurance about the absence of undeclared nuclear material and activities in Iran*",[3] nor can it assess the role of the military in Iran's nuclear programme.

The report also states that "*any progress in that regard requires … transparency that goes beyond the measures prescribed in the Safeguards Agreement and Additional Protocol*"[4].

Already in September 2005 the Board of Governors adopted a resolution urging Iran "*to implement transparency measures which extend beyond the formal requirements of the Safeguards Agreements and Additional Protocol*".[5]

---

[2] A Comprehensive Safeguards Agreement remains in force only for so long as the state remains party to the NPT, whereas under a INFCIRC/66-type agreement, all nuclear material supplied or produced under that agreement would remain under safeguards, even if the state withdrew from the NPT, until such time as the IAEA determined that such material was no longer subject to safeguards.

[3] GOV/2006/27, paragraph 33.

[4] Ibid., paragraph 34. This report also states that: *"Additional transparency measures, including access to documentation, dual use equipment and relevant individuals, are … still needed for the Agency to be able to verify the scope and nature of Iran's enrichment programme, the purpose and use of the dual use equipment and materials purchased by the PHRC* [Physics Research Center] *and the alleged studies which could have a military dimension*".

[5] GOV/2005/77 OP 4 (i).

The problem here is that such IAEA Board resolutions do not provide the Agency with any additional legally binding verification authority.

One should remember that in November 2003, in a damning report to its Board of Governors, the IAEA revealed that Iran had for the past eighteen years been pursuing an undeclared centrifuge uranium enrichment programme and had concealed a considerable number of nuclear facilities, materials, and activities in violation of its safeguards obligations. This should have been reported to the UN Security Council (UNSC) as foreseen in the Agency's Statute. It was not, for a number of reasons.

First, many countries insisted, as indicated in the IAEA's report, that "*to date, there is no evidence that the previously undeclared nuclear material and activities referred to above were related to a nuclear weapons programme*",[6]even if everyone was well aware that the Agency had neither the authority nor the means required to prove that this could be the case before it was too late.

Secondly, Iran was not reported to the Security Council because of the fear of many Member States that if the issue got out of the IAEA's hands it could initiate a scenario similar to the one that led to the conflict in Iraq.

Also, there was the fear that if Iran was referred to the Security Council, Russia and China would use their veto right to block any resolution adverse to Tehran, as was the case for North Korea, with no concrete outcome whatsoever.

This explains why, during the last quarter of 2003, three members of the European Union (EU)--France, Germany and the United Kingdom (the so-called EU-3)--opted for a diplomatic approach in exchange for a commitment by Tehran to suspend all enrichment related activities. It is regrettable that the US did not, at that time, actively support these efforts. This was a major missed opportunity.

---

[6] GOV/2003/75, paragraph 52.

Three years later, ignoring the repeated requests of the IAEA, Iran has continued its tactics of obfuscation and delay and has made significant progress in developing its nuclear programme. It now has a stockpile of more than 100 tons of natural uranium hexafluoride (the feed material for the enrichment process) safely stored in underground tunnels. It is also producing low-enriched uranium (LEU) in its pilot enrichment plant and is continuing the construction of the large underground enrichment facility at Natanz. Iran has also made significant progress with respect to its intermediate-range ballistic missiles, which now appear capable of carrying a nuclear warhead a distance of 2000 km or more.

The Agency revealed in November 2005 and confirmed in February 2006 that Iran had been found in possession of documents for "*the casting of enriched and depleted uranium metal into hemispheres, related to the fabrication of nuclear weapon components*",[7] in violation of Article II of the NPT. It was also reported that the Agency had obtained information concerning "*tests related to high explosive and the design of missile re-entry vehicle, all of which could have a military nuclear dimension*", but it was not until 4 February 2006 that the Board of Governors finally decided to inform the UNSC.

It took another six months for the UNSC to adopt, on 31 July 2006, a resolution under Chapter VII of the UN Charter demanding that Iran "*suspend all enrichment-related and reprocessing activities, including research and development*".[8] The resolution also expressed the Security Council's "*determination to reinforce the authority of the IAEA process*" and called "*upon Iran to act in accordance with the provisions of the Additional Protocol and to implement without delay all transparency measures as the IAEA may request in support of its ongoing investigation*". It seems that this formulation does not provide the IAEA with the legally binding authority that the Agency has repeatedly stated is needed in Iran. This is another major missed opportunity, all the more baffling, given that such a demand does not in any way involve sanctions, and therefore should find unanimous support in the Security Council.

[7] GOV/2006/15, paragraph 20.
[8] S/RES/1696.

The tardiness of the Security Council in making the necessary decisions has mainly been due to the attitude of Russia and China**,** both of which have continued to threaten to veto any UNSC resolution adverse to Iran. Everyone agrees that a diplomatic solution to the crisis would be by far the best. But a weak and divided Security Council will not help in this regard.

Could it be that Russia, which clearly does not want to see Iran acquiring nuclear weapons, is making its cooperation dependent upon a number of US commitments such as not meddling in Ukrainian and Georgian affairs?

This deserves serious consideration. It would indeed be dreadful if Russia, by delaying or watering down any involvement of the UNSC while delivering more and more sophisticated weapons to Iran, were to push the exasperation of the US and possibly the EU to the point where they would opt for unilateral sanctions. This would inevitably fuel further anti-American feelings worldwide, while Russia would take advantage not only of higher oil prices but of appearing to behave more responsibly, particularly in the eyes of the countries belonging to the non-aligned movement.

The latter bear their share of responsibility in the growing crisis of the non-proliferation regime. They have for too long pretended to be blind to the developments in Iran and, beyond simply remaining silent, they have actively supported Iran by minimising the seriousness of the situation. It is only recently that some Arab countries seem to have realized the danger that nuclear weapons in Iran would represent for the stability of the region.

The May 2005 NPT Review Conference was a complete failure, in part because of Egypt's uncompromising negotiation stance, and in part because of the lack of progress by the five nuclear-weapon states (NWS) with regard to the implementation of the 13 practical steps agreed upon in the final document of the 2000 NPT Review Conference, "*for the systematic and progressive [disarmament] efforts to implement Article VI of the NPT*". This has been a major cause of frustration among almost all NNWS. If the most powerful nations on earth insist, as they have in

recent years, that they need to maintain and further improve their nuclear arsenals, how can they convince weaker nations that they do not need those weapons even as a deterrent?

As if all this were not enough to undermine the credibility of the NPT, in July 2005 the US offered India a broad nuclear cooperation agreement, granting India all the benefits that are reserved for non-nuclear-weapon states under the NPT, without requesting from India any real counterbalancing commitment such as ratifying the nuclear Comprehensive Test Ban Treaty (CTBT)[9]. If the US now succeeds in curbing the Nuclear Suppliers Group (NSG) export rules for what the US has unilaterally defined as the "special case" of India, it is hard to see why Russia, China and others would not feel free to strike similar deals with countries such as Pakistan and Iran.

Is it therefore too late to salvage the credibility of a Treaty ratified by 188 states and which has been, until recently, an indisputable success? Unfortunately, the answer is most likely: Yes, unless the international community without further delay acts upon the lessons learned from the crises in North Korea and Iran and takes the necessary actions.

The most effective, unbiased, and feasible way to establish the necessary measure is for the UNSC to adopt (under Chapter VII of the UN Charter) a generic (i.e., not state specific) and legally binding resolution declaring that if a state is reported by the IAEA to be in non-compliance:

a- the noncompliant state will have to suspend all sensitive nuclear fuel cycle activities for a specified period of time,[10] but could by all means continue to produce electricity from nuclear power plants;

b- if requested by the IAEA, the UNSC would automatically adopt a specific resolution (under Article 41 of the UN Charter) making it

[9] It is quite astonishing that NNWS and in particular those belonging to the non-aligned movement did not react (more) strongly to the announcement of this agreement.

[10] The suspension should last at least as long as the IAEA has not drawn the conclusion that the State declaration is correct and complete, or possibly longer, in line with what Dr. ElBaradei has called a "*rehabilitation period*" or a "*probation period, to build confidence again, before you can exercise your full rights*". (Cf. interview with *Newsweek*, 23 January 2006).

mandatory for the non-compliant state to provide the Agency with the necessary additional verification authority until it has been able to conclude that there is no undeclared nuclear material and activities in the state and that its declarations to the Agency are correct and complete; and

c- no nuclear material would henceforth be delivered to that state without the guarantee that all nuclear material and facilities declared to the IAEA would remain under Agency safeguards even if the state withdrew from the NPT.

Withdrawal from the NPT

The current crisis in Iran appears to be a repetition of the earlier (and ongoing) crisis in North Korea.

Since 1993 North Korea has been declared repeatedly by the IAEA to be in non-compliance with its safeguards agreements and has been reported to the UNSC, without the latter deciding to take any action.

In 2003, North Korea gave notice that it was withdrawing from the NPT, and in 2004 declared that it possessed nuclear weapons, without any move from the UNSC because of China threatening to use its veto right against any resolution adverse to North Korea.

If the international community does not seem to have learned the lessons from the crisis in North Korea, Iran has. There are signs that it may be preparing to follow the same steps as North Korea if the development of its nuclear programme is threatened by the UNSC or any of its members.

While the international community has been debating what to do, Iranian leaders have made stunning advances in mastering all technological aspects of uranium conversion and enrichment without incurring any negative repercussions. Although Iran has no use for domestically produced LEU for peaceful purposes for at least the next 10 years, it is nonetheless busy installing centrifuge enrichment cascades at Natanz.

By ignoring the repeated requests of the IAEA Board of Governors and recently of the UNSC to suspend these activities, Iran is jeopardising any chance of concluding a broad cooperation agreement with the EU that would open the door to large foreign investments, high technology transfers and security guarantees.

By cleverly using to their advantage the divisions among the major powers, by fuelling the fears of a rapid rise in oil prices, and by threatening to share their sensitive nuclear know-how (including uranium enrichment) with other states and to increase their support to terrorist movements in the region, Iran's leaders have so far been confident that the UN Security Council will be unable to agree on any significant sanctions. Is not Iran's uncompromising attitude a step to prepare for its withdrawal from the NPT? In a letter addressed on 21 March 2006 to UN Secretary General Kofi Annan, Iran complained that senior US officials have publicly threatened to resort to force against Iran "*in total contempt of international law and the fundamental principles of the Charter of the United Nations*".

Also, on 7 May 2006 the Iranian Parliament, in a letter to UN Secretary General Kofi Annan, threatened to force Iran's government to withdraw from the NPT if pressure continued for Tehran to suspend uranium enrichment activities.

Most recently, on 5 September 2006 it was announced that the Iranian Parliament's National Security and Foreign Policy Commission was considering a bill which would suspend all IAEA inspections in Iran, in clear violation of Iran's safeguards agreement and tantamount to withdrawing from the NPT.

It is therefore essential for the international community not to wait for Iran's withdrawal from the NPT.[11] The UNSC should adopt (under Chapter VII of the UN Charter) a generic and legally binding resolution stating that if a state withdraws from the NPT **after** being

[11] Nor should the international community wait for similar actions such as Iran denying IAEA inspectors access to its territory, which would make it impossible for the Agency to fulfil its verification mandate.

found by the IAEA to be in non-compliance with its safeguards undertakings:

a- such withdrawal will constitute a threat to international peace and security as defined under Article 39 of the UN Charter; and

b- materials and equipment made available to such a state, or resulting from the assistance provided to it under a Comprehensive Safeguards Agreement will be forthwith removed from that state under IAEA supervision and remain under Agency Safeguards[12].

Conclusion

The much-publicized divisions among the five veto-wielding members of the UN Security Council on how the Council should deal with the crisis in North Korea and Iran are profoundly damaging the credibility of the non-proliferation regime and encourage states found to be in non-compliance with their safeguards agreements to defiantly ignore the resolutions adopted by the IAEA Board of Governors and the UN Security Council.

This is why it is so urgent for the UNSC to adopt the generic resolutions suggested in this paper.

Einstein said: "*The world will not be destroyed by those who do evil, but by those who let them do it and refuse to intervene*".

[12] This is not a new concept. Under Article XII.A.7 of the IAEA Statute, the Agency has the right to "withdraw any material or equipment made available by the Agency or a member" in furtherance of an Agency project in the event of non-compliance and failure by the recipient State to take fully corrective action within a reasonable time. Article XII.C. also has a similar provision.

SAFEGUARDING THE FUTURE OF THE NPT: PREPARING FOR THE NPT REVIEW CONFERENCE 2010

Rüdiger LÜDEKING[1]

The nuclear non-proliferation regime is in a state of crisis. This should prompt widespread international concern and determined efforts to safeguard the future of the regime and of its centrepiece, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). It is therefore surprising that it has seemingly not prompted that reaction, and that as yet the failure of the 2005 NPT Review Conference to arrive at an agreed result has not served as a wake-up call for the international community to join forces to address the risk of erosion that the NPT regime faces.

The risk of erosion is essentially two-fold: on the one hand, we have witnessed serious violations of the non-proliferation obligation contained in the Treaty The cases of Iran and North Korea, which are at the centre of international attention, constitute key challenges requiring determined and unified action on the part of the international community. At the same time, there is a perception of a "renaissance" of nuclear weapons in that the nuclear weapon states are not living up to the obligations that they have undertaken under Article VI of the NPT and in the so-called 13 practical steps for the systematic and progressive implementation of that Article as defined in the Final Document adopted by the 2000 NPT Review Conference. These 13 steps provide for an incremental approach and establish a benchmark against which the progress in nuclear disarmament must be judged. Unfortunately, despite the significant nuclear disarmament steps undertaken in particular by the United States and Russia after the end of the Cold War, not much

[1] Ambassador and Deputy Commissioner of the Federal Republic of Germany for Arms Control and Disarmament. The views expressed in this article are those of the author and do not necessarily reflect the views of the German Federal Foreign Office.

progress has been achieved in the implementation of the results of the 2000 Review Conference. On the contrary, there is an impression, not least due to the ongoing modernization of nuclear arsenals, that the nuclear-weapon states are unwilling to fulfil their disarmament obligations and intend to cling indefinitely to their nuclear-weapon capabilities. In addition, there is a perception that in today's world nuclear weapons continue to confer status and power on the possessor state, thus further boosting the attractiveness of these weapons.

The end of the Cold War did not mark the end of history but only the end of old certainties. Today's security landscape is more fragmented and less predictable. The bipolar Cold War order has given way to a wide variety of military and non-military risks and a marked trend towards a "deregulation" of security relations. Thus, more than ever before, the security challenges we face, in particular the dangers of a proliferation of weapons of mass destruction, can only effectively be addressed by the international community joining forces and closely working together on the basis of commonly defined norms and the rule of law. The NPT provides the indispensable normative basis to address the dangers of nuclear proliferation and nuclear war. Without it, there is no legitimacy for efforts undertaken to fight nuclear proliferation; nor will such efforts be effective. Thus, everything must be done to prevent the NPT regime from being undermined. We need to undertake every effort to maintain and strengthen the integrity and authority of the NPT. This is all the more important, as the risks of deterrence failing have significantly increased in a more fragmented security landscape, which is no longer dominated by a bipolar confrontation of rational actors.

What is to be done?

In terms of what needs to be done, six key tasks can be identified:

First, we need to get our priorities right. If – as it is usually claimed – nuclear proliferation is the key foreign policy challenge today, we should not let secondary interests unduly influence us. This should be a guiding principle for dealing with proliferation cases like North Korea and Iran. This should also be a key consideration in determining the terms of nuclear cooperation with India. India should be integrated into the

mainstream of the nuclear non-proliferation regime; however, it should not be seen as benefiting from its status as a de facto nuclear-weapon state. Finally, the getting-priorities-right-paradigm would also mean that the forthcoming NPT review process leading to the Review Conference in 2010 should be considered as an opportunity to be seized to strengthen the Treaty regime. The review process should not be taken lightly nor should an agreed outcome of the process be regarded from the beginning as unimportant as some governments did in the case of the 2005 Review Conference.

Second, we need to prevent the re-emergence of strategic rivalries and establish a common basis for the fight against nuclear proliferation. During the post-Cold War period, strategic rivalries have been largely absent. However, now there are some signs that we are witnessing a gradual return of such rivalries. In order to stop and reverse such a trend, which could have wide-ranging implications not only for the future of existing nuclear arsenals but also for the overall prospects for preventing proliferation, existing multilateral fora as well as bilateral relations should be used to build and expand the nuclear non-proliferation consensus and to strengthen the NPT regime. Apart from other fora, including the G-8 and in particular the UN Security Council, NATO and the NATO-Russia Council can make an important contribution to that end.

Third, we need to balance the "toolbox" approach to the fight against proliferation. Over the last few years, much emphasis has been given to fighting proliferation through deterrence, defence, and denial. However, the limitations of an approach restricted to these three elements have become obvious. Today's terrorists can hardly be deterred nor can for that matter the regimes whose very existence is being put on the line. We also cannot build impenetrable defences against the threat or use of nuclear weapons. Finally, denial through export controls and interdiction measures does not provide a panacea in a globalized world where there is universal access to technology and where secondary proliferation is rife. An effective non-proliferation policy can only be pursued jointly on the basis of a comprehensive and integrated approach based on commonly agreed norms. It is therefore unfortunate that such a multilateralist approach to non-proliferation is sometimes neglected and that some have

deliberately played down or underestimated the role of the NPT as the key instrument and normative basis for all nuclear non-proliferation efforts. The forthcoming review process should not only be seen as an opportunity for extensive discussions, which in the previous review cycle degenerated into ideological debates over disarmament versus non-proliferation, but be seriously used to reach a consensus on the role of the Treaty and the way forward as well as on measures to strengthen the Treaty regime in all its aspects.

Fourth, we need to re-establish the credibility of the NPT. In order for the Treaty to continue to fulfil its function, the fundamental bargain underlying it must not be allowed to erode. The firm relationship that the Treaty establishes between disarmament and non-proliferation must be respected. The non nuclear weapon states' commitment to renounce the acquisition and possession of nuclear weapons must be matched by the commitment of the nuclear weapon states to nuclear disarmament. This, in a way, means that a double track approach needs to be pursued: not only do we need to continue our efforts to strengthen and implement the non-proliferation norm and take an unequivocal stand on the pending regional proliferation challenges; we also need to instill a new momentum in the disarmament process. In addition, we should be careful not to create double standards or to cement the "have vs. have-not" problem: This aspect is of particular relevance regarding possible solutions to the challenge of preventing the misuse of sensitive nuclear activities for military ends, to the verification concept for a fissile material cut-off treaty, and also to the treatment of India and the other de facto nuclear- weapon states remaining outside of the NPT.

Fifth, we need to strengthen the NPT regime. For a start, it seems important to renew the commitment to not only the Treaty but also the understandings and agreements reached in previous review processes. It might seem superfluous to stress this. However, regrettably the validity of the results of the 2000 NPT Review Conference, as reflected in the Final Document that was adopted by consensus, has been called into question. This has given rise to concerns that adherence to achievements at such review conferences is at the whim of individual states parties. If that were to be the general understanding, the forthcoming review process would from the start not seem to be very meaningful. A clear reaffirmation of

the commitment to the 2000 Final Document, including the 13 steps for the implementation of Article VI contained therein, would therefore be of key importance.

As one track of a double track approach the following priority tasks and objectives should be pursued in order to strengthen the non-proliferation commitment of the NPT:

- a diplomatic solution to the pressing regional proliferation risks, in particular Iran and North Korea;
- the improvement of verification, in particular through making the International Atomic Energy Agency (IAEA) Additional Protocol the new verification standard of the NPT;
- the effective prevention of any misuse of civilian nuclear programmes for military ends, in particular through a solution to the risks posed by the nuclear fuel cycle (the solution to be found should be balanced, consistent with the basic principles pertaining to international relations, and not create dividing lines among NPT parties);
- enhancing the security of nuclear weapons and fissile materials with a view to preventing terrorists from gaining access to them; and
- strengthening the role of the UN Security Council as the final arbiter on the consequences of non-compliance, a task which would be helped by a broadening of the consensus in the UN Security Council on non-proliferation issues and on how to deal with significant violations of the NPT.

The second track, geared towards instilling a new momentum in the process of nuclear disarmament, should in particular include endeavours to:

- overcome the deadlock in the Conference on Disarmament in Geneva and restart substantial work on various items on its agenda, in particular commence negotiations on a fissile material cut-off treaty, which remains a key priority;
- provide an impetus for the continuation of the dialogue between Russia and the United States on strategic nuclear weapons;
- promote an incremental arms control approach regarding non-strategic nuclear weapons; and
- promote the early entry into force of the Comprehensive Test Ban Treaty (CTBT) and pending that the maintenance of a complete

moratorium of nuclear-weapon test explosions or any other nuclear explosions.

Sixth and last, but not least, we need to address the root causes of proliferation. Proliferation cannot be considered as an isolated risk. Attempts to acquire nuclear weapons can in most cases be traced back to unresolved regional security problems or a state or regime perceiving an existential threat to its survival. In a broader sense, this points to comprehensive efforts to be undertaken to resolve regional conflicts and ease existing tensions. In the context of the NPT it highlights the issue of the security of non-nuclear-weapon states and the important role that security guarantees extended by the nuclear- weapon states and the establishment of nuclear weapon-free zones can play in this regard. The 2000 NPT Review Conference clearly reaffirmed the importance of this issue and agreed that legally binding security assurances by the five nuclear-weapon states to the non-nuclear weapon states party to the NPT should be worked out. Regrettably, however, in the meantime, doubts have been expressed as regards the continuing support of the nuclear-weapon states for this goal. Today there is a widespread perception that some nuclear- weapon states no longer stand by the commitment they made in UN Security Council Resolution 984 of 1995 on security assurances for non-nuclear-weapon states party to the NPT. It would be particularly important to clarify this issue as the security assurances provided in that resolution were included in the package adopted at the 1995 Review and Extension Conference.

NATO and the NPT

What can NATO do to safeguard the future of the NPT? Following the 2005 NPT Review Conference, which ended without adoption of a final document, and a few weeks later the failure of the UN Millenium Review Summit to agree on a chapter on disarmament and non-proliferation in its declaration, there has been a sense of deep pessimism. The discussion on non-proliferation seems to be paralysed and entrenched in well-known ideological debates which do not augur well for the preparations for the NPT Review Conference in 2010. In such a situation, leadership is of the essence. NATO and the three Western nuclear weapon states can, as in the past, exercise such

leadership and thereby create the prospect of a successful outcome for the forthcoming review process. Sending the right signals at the beginning of the preparatory process could also have a beneficial impact on the current endeavours to solve the existing non-proliferation challenges.

In taking on such a leadership role NATO should move to a more active posture and be seen as a driving force for a successful NPT Review Conference in 2010. Specifically, NATO could, taking the offensive on nuclear disarmament,

- emphasize the link between non-proliferation and disarmament and reaffirm the commitment to nuclear disarmament. This is all the more important in the face of existing doubts about the sincerity of the nuclear weapon states and their readiness to honour their disarmament commitments. In order to dispel such doubts a small but important step would be a reaffirmation of the well-known formula of characterising the NPT as "the cornerstone of the nuclear non-proliferation regime and the essential foundation for the pursuit of nuclear disarmament";
- stress the importance of the strategic dialogue between the United States and Russia on strategic nuclear weapons. The expiration of the first Strategic Arms Reduction Treaty (START I) in 2009 should provide the cue for addressing the need for a follow-on agreement which could significantly expand the scope of the 2002 Strategic Offensive Reductions Treaty, also known as the Moscow Treaty, and ensure the continued application of cooperative verification measures;
- start negotiations on non-strategic nuclear weapons with Russia, this category of weapons as yet not being the subject of any formal arms control agreement. The objective of an arms control approach to this category of weapons is already on the agenda of the NATO-Russia Council following the suggestions made in the Report on Options for Confidence and Security Building Measures, Verification, Non-proliferation, Arms Control and Disarmament that NATO foreign ministers adopted in December 2000.

Addressing Non-Strategic Nuclear Weapons

Unfortunately, the issue of non-strategic nuclear weapons, which is also contained in the 13 steps of the 2000 Final Document, has sparked

a controversial debate. At the heart of this debate has been the question of compatibility with the Alliance's 1999 Strategic Concept, which provides for the basing of US non-strategic nuclear weapons on the territory of European Allies and describes these weapons as an essential political and military link between the European and North American Members of the Alliance. However, this debate seems to miss the point. The withdrawal of NATO's nuclear weapons in Europe is not an immediate or short term goal. NATO has – since the end of the Cold War – implemented dramatic reductions of more than 90 per cent and has at present only a single land based nuclear weapon system – gravity bombs for dual capable aircraft – deployed in Europe. In contrast, Russia still disposes of a huge arsenal of nuclear warheads for non-strategic delivery systems, the exact number of which is unknown. Published estimates range between 3,000 and 12,000 warheads. However, it is not only this numerical disparity between NATO and Russia which is of relevance to European security. Russian non-strategic weapons might also pose risks for other reasons: age and possibly the absence of modern safety features, forward basing and decentralised storage and deployment, as well as possible additional transportation risks and the small size of many of the weapons foster concerns about enhanced proliferation risks and the danger that terrorists might gain access to them.

There seems to be no alternative to an incremental approach to non-strategic nuclear weapons, which starts with transparency and confidence building measures. Such an incremental approach could include the following elements:

- Reaffirmation of the 1991/92 Presidential Nuclear Initiatives (by way of a joint US/Russian declaration);
- Provision of detailed information on the implementation of the 1991/92 Presidential Nuclear Initiatives;
- Information exchange on a voluntary basis in the NPT context on existing non-strategic nuclear-weapon holdings (the exchange limited to aggregate numbers of warheads as well as numbers and characteristics of delivery means);
- Exchange of information on a confidential basis between possessor states or in the NATO-Russia Council context; such an exchange could include more sensitive items like alert status, change in status or deployment mode, security provisions and safety features, more

disaggregated data on warheads and delivery means, exchange of visits, and observance of exercises involving non-strategic nuclear weapons;
- Agreement on minimum security and safety requirements for the handling and storage of non-strategic nuclear warheads and delivery systems;
- Agreement on de-alerting of non-strategic nuclear warheads;
- Agreement on deployment limitations (possibly deployment restrictions like the removal of non-strategic nuclear weapons from ships or a renunciation of decentralised storage);
- Codification of the 1991/92 Presidential Nuclear Initiatives including an agreement on disaggregated data exchange and verification measures;
- Global agreement on the elimination of certain non-strategic nuclear weapon categories (*inter alia,* atomic demolition munitions, nuclear artillery, and short range ballistic missile warheads); and
- Agreement on further reductions of tactical nuclear weapons.

Conclusions

The suggested pro-active approach to be adopted by NATO to the forthcoming NPT review process is guided by the security interests of the Alliance and is consistent with the stated policy and the requirements of the 1999 Strategic Concept. The Alliance would reaffirm the commitments of its member states under the NPT and demonstrate its resolve to take a lead. It would certainly help to nip in the bud the ideological debates that can be expected in the forthcoming Preparatory Committee meetings of the 2010 Review Conference. It would also force states which only focus on the disarmament obligations under the NPT to take a more constructive stance on non-proliferation concerns. It is in the hands of the Alliance to make a significant contribution towards safeguarding the future of the NPT and protecting the treaty against a creeping erosion process.

US NUCLEAR WEAPON PROGRAMMES: IMPLICATIONS FOR NON-PROLIFERATION

John R. HARVEY[1]

This paper will describe where we are heading in the US nuclear-weapon programme, including efforts to "transform" the stockpile and supporting infrastructure, and what it might mean for the global non-proliferation regime, for developing a consensus for restructuring that regime, and for the United States' commitment under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

Let me summarize the key points of my presentation, and then elaborate more broadly:

- To meet its own security needs and those of its allies, the United States will need a safe, secure, and reliable nuclear deterrent for the foreseeable future.

- We see increased risk, absent nuclear testing, in assuring the long-term reliability of today's stockpile—i.e., the legacy warheads left over from the Cold War.

- Nor is today's nuclear-weapon complex sufficiently "responsive" to fixing technical problems in the stockpile, or to potential adverse geopolitical change.

[1] Director, Policy Planning Staff, National Nuclear Security Administration, US Department of Energy, since March 2001, and Deputy Assistant Secretary of Defense for Nuclear Forces and Missile Defense Policy from March 1995 to January 2001.

- Our task is to work to ensure that the US nuclear-weapon enterprise, including the stockpile and supporting infrastructure, meets long-term national security needs.

- Our approach is to develop and field replacement warheads for the legacy stockpile—so-called Reliable Replacement Warheads (RRW)—as a means to transform both the nuclear stockpile and supporting infrastructure.

- We intend to do this without requiring nuclear testing.

Regarding non-proliferation:

- US nuclear modernization, including the RRW programme, is unlikely to upset the current non-proliferation regime by causing states with nuclear weapons to vertically proliferate, or by causing non-nuclear-weapon states to seek to acquire nuclear weapons.

- Nor should it disrupt efforts to strengthen that regime with ambitious new initiatives—reaching broad international consensus on such initiatives will be difficult but not because of US nuclear-weapon modernization.

Non-proliferation Challenges

There is a growing recognition that the traditional non-proliferation regime—based, among other things, on the NPT and a broad set of activities undertaken by the International Atomic Energy Agency (IAEA) is inadequate for today's threats and needs to be augmented and strengthened.

The war in Iraq in 1990-1991, which led to the discovery of an advanced Iraqi nuclear-weapon programme, began to alter our perception about the adequacy of the non-proliferation regime. Subsequent and recent revelations about covert nuclear-weapon programmes in North Korea, Iran and (formerly) Libya, have crystallized this concern.

These violations of the NPT and of IAEA safeguards agreements demonstrate that the regime is only as strong as the underlying commitments of states to abide by their obligations, including restricting the transfer of sensitive technologies when their end-use is suspect.

We have been taking increasingly aggressive steps to interdict weapon-usable nuclear materials and to prevent dissemination of nuclear related technology via strengthened export controls, increased use of modern detection technologies, and improved international cooperation. For example, the Second Line of Defence Programme is employing radiation detection systems at high-risk land-border crossings, airports, and seaports in Russia, increasing our ability to interdict diverted nuclear materials entering or leaving the country. The Megaports Initiative, established in 2003, is installing detection systems at major ports throughout the world for similar reasons. If diversion is detected, a coalition of the willing under the Proliferation Security Initiative is able to provide means to interdict or disrupt it.

In July 2006, just before the G-8 summit, Presidents Bush and Putin announced the Global Initiative to Combat Nuclear Terrorism to strengthen cooperation worldwide on nuclear materials security and to prevent terrorist acts involving nuclear or radioactive substances. Paired with UN Security Council Resolution 1540, we now have both the legal mandate and the practical means necessary for concrete actions to secure nuclear material against terrorist procurement efforts.

Both President Bush and IAEA Director General Mohammed El Baredei have called attention to the proliferation risks posed by acquisition of enrichment and reprocessing capabilities by certain states for ostensibly peaceful purposes, but that exploit these capabilities in covert nuclear-weapon programmes. Possession of these capabilities by states with questionable commitments to non-proliferation must be discouraged. We are exploring options to limit the spread of these most sensitive elements of the fuel-cycle by having nuclear fuel suppliers come together to identify ways to provide fuel assurances (of low-enriched uranium supply and spent-fuel take back) for states that foreswear new enrichment or reprocessing capacity.

Other ideas to augment the current non-proliferation regime include:

- widespread and full implementation of the IAEA Additional Protocol to strengthen the IAEA's hand in its effort to uncover illicit activities, and

- seeking alternative security constructs for countries that have considered, or might consider, seeking nuclear weapons but have renounced that option.

All of these ideas and activities require, or will require, a strong element of international cooperation if they are to be successful, and the challenges in attaining it are formidable. The question at hand is to address whether US nuclear modernization could pose an additional roadblock to achieving the international consensus necessary to realize a strengthened regime or, more ominously, whether such modernization in itself could stimulate proliferation.

US Nuclear Weapon Programme

The US Stockpile Stewardship Programme is working—the stockpile remains safe and reliable and does not require nuclear testing. This assessment is based on a foundation of past nuclear tests augmented by cutting-edge scientific and engineering experiments and analysis including extensive laboratory and flight tests of warhead components and subsystems.

As we continue to draw down the stockpile, however, we must consider the long-term implications of successive refurbishments of the legacy warheads from the Cold War. Each refurbishment takes us further from the tested configurations of these highly optimized systems, raising concerns about our ability to ensure their reliability over the long term.

This is the impetus for our work on RRW—indeed, it is to extend the life of those military capabilities provided by existing warheads, *not* to develop warheads for new or different military missions.

The RRW programme is examining the feasibility of providing a wholesale replacement of components in legacy warheads. By relaxing Cold War design constraints that sought maximum yield in a minimum size/weight package, it will allow design of replacement components that are easier and less costly to manufacture, are safer and more secure, eliminate environmentally dangerous materials, and increase design margins, thus ensuring long-term confidence in reliability. RRW thus offers a means to transform to a much more efficient and responsive, much smaller, and, we hope, less costly nuclear-weapon R&D and production infrastructure.

The RRW effort itself has positive implications for non-proliferation. Because these warheads would be designed with more favorable performance margins, and be less sensitive to incremental aging effects, they would reduce the possibility that the United States would ever be faced with a need to conduct a nuclear test to diagnose or remedy a stockpile reliability problem.

Moreover, once a transformed production complex demonstrates that it can produce replacement warheads on a timescale in which geopolitical threats could emerge, or respond in a timely way to technical problems in the stockpile, we can eliminate many spare warheads, reducing further the nuclear stockpile.

In 2005, an RRW design competition was initiated involving two independent design teams from our nuclear-weapon laboratories. A competition of this sort has not taken place in over two decades, and the process is providing a unique opportunity to train the next generation of nuclear-weapon designers and engineers. The programme is on schedule—preliminary designs were provided in the spring of 2006. Intensive peer review is now underway that will lead to selection of a preferred option. A decision to proceed into RRW engineering development would follow and would require the concurrence of Congress.

What else is going on in the US nuclear programme? There is certainly a lot of misinformation about it. Contrary to popular myth, the United States has no programmes underway to develop new warheads to

provide new military capabilities (e.g., precision low-yield warheads, warheads to counter hard and deeply buried installations, or warheads to neutralize stored chemical or biological weapons). There is no "push" for such weapons—no current military requirements for them. Nor is there support in Congress for them. We have not developed and fielded a new warhead in nearly 20 years. The last time we modified an *existing* warhead—the B-61-11 earth penetrator (to provide a safer way to achieve *existing* military capabilities)—was ten years ago during the Clinton Administration. Even studies of certain warheads that would provide new or different military capabilities, which many of us consider prudent, have found little support in Congress.

What we are doing, in addition to RRW, is providing support to the current stockpile via ambitious programmes to extend the life of warheads first deployed during the Cold War, completing critical scientific facilities and capabilities to advance our stewardship of the stockpile, revitalizing key manufacturing capabilities, and planning for the future nuclear-weapon complex infrastructure.

In summary, ongoing US nuclear-weapon modernization is modest and primarily focused on extending the life of the military capabilities provided by existing warheads.

Implications of US Nuclear Modernization for Non-Proliferation

Would such modernization, or even a more aggressive US programme involving new warhead development, stimulate proliferation? Would it hamper collective efforts to secure one or more elements of a strengthened non-proliferation regime? If the answer to either question is "yes", it could, as some will argue, undermine US leadership in seeking a strengthened regime.

To answer the first question we must examine the proliferation implications of US nuclear-weapon modernization for three groups: existing nuclear powers, rogue states, and terrorists.

Any presumed proliferation implications of such modernization would depend on the specific nature of the warhead concepts under consideration. For example, R&D on designs such as RRW that could increase confidence in stockpile safety and reliability under a test moratorium would be unlikely to generate a comparable reaction from *nuclear powers* such as Russia or China, or even India and Pakistan. These countries typically base warhead development programmes on their own perceived security needs, not on the specifics of US nuclear R&D.

As a case in point, the announcement in 2004 by President Putin that Russia was developing a hypersonic cruise missile to penetrate US ballistic missile defences was greeted with silence at the Pentagon. Because our missile defences are not directed against Russia, why should we become alarmed if Russia decides to invest substantial resources in this system? After all, although we are not yet allies, neither are we the adversaries we were during the Cold War when one side's weapon modernization cycle sometimes generated a reaction in the other.

A major non-proliferation objective of the United States is to prevent rogue states and terrorist groups from acquiring weapons of mass destruction (WMD) and systems for their delivery. US nuclear modernization will not increase incentives for *terrorists* to acquire such weapons—those incentives are already high and are unrelated to US nuclear (or conventional) capabilities.

Nor is it likely to have any impact on *rogue states*, whose proliferation marches forward independently of the US nuclear programme. Over the past decade we have seen very significant reductions in the numbers of US (and Russian) nuclear weapons, reductions in the alert levels of nuclear forces, no US nuclear testing or production of nuclear materials for weapons, and very little US nuclear modernization. There is absolutely no evidence that these developments have caused North Korea or Iran to slow down covert programmes to acquire capabilities to produce nuclear weapons. On the contrary, these programmes have accelerated during this period culminating, in the case of North Korea, with an attempted nuclear test in October 2006.

Nor, by the way, did such US restraint convince India and Pakistan not to test in 1998, or to stop their build up of nuclear capabilities.

North Korea and Iran in particular seek WMD to deter the United States from taking steps to defend its interests and allies in their regions. In this regard, their incentives to acquire nuclear weapons may be shaped more by US advanced conventional weapons capabilities and our demonstrated will to employ them to great effect—in Bosnia, Kosovo, Afghanistan, and during both wars with Iraq—than by anything the United States has done, or is doing, in the nuclear-weapon arena.

Moreover, the extension of US and UK nuclear forces to NATO—a truly "shared deterrent" in that Alliance—and to other allies has been a very important tool for non-proliferation. It has obviated the need for allies to develop and field their own nuclear forces, all of which are technically capable of doing so.

The United States should, of course, be concerned about how its nuclear policies could affect international support among friends, allies, and partners for strengthened non-proliferation programmes. In this connection, critics have charged that our policies have harmed non-proliferation. Some highlight, often in a misleading way, certain nuclear-weapon R&D activities in order to call into question the US commitment to non-proliferation or impede its leadership in advancing a more robust global non-proliferation regime. Often cited is an alleged lack of progress by the US in fulfilling it obligations under Article VI of the NPT.

On the contrary, our non-proliferation record is exceptionally good. Our nuclear posture and our non-proliferation policy are mutually supportive and entirely consistent with our obligations under Article VI. In 1995, when the NPT was indefinitely extended, the United States reiterated its commitment to work toward the ultimate goal of eliminating nuclear weapons and to achieving general and complete disarmament. Remarkable progress has been made in fulfilling this commitment and reducing reliance on nuclear forces in our national security strategy. The nuclear arms race has, in fact, been halted. The United States has been

reducing its nuclear forces and nuclear-weapon stockpile in a consistent fashion through both unilateral and bilateral initiatives, and is working cooperatively with allies and partners to further reduce nuclear threats. The record speaks for itself, but here are a few recent accomplishments[2] :

- The Moscow Treaty will reduce operationally deployed strategic nuclear weapons to 1,700 to 2,200 by 31 December 2012, down from about 5,300 as of the end of 2003. These levels are far lower than many of us thought possible just a few years ago.

- In May 2004, the President took steps to reduce the total size of the US nuclear stockpile. By 2012 or sooner, the stockpile will be reduced by nearly one-half from the 2001 level, resulting in the smallest stockpile since the Eisenhower administration. This represents roughly a factor of four reduction since the end of the Cold War.

- As a direct result of this decision, the United States announced in November 2005 that it will remove, in future decades, up to 200 metric tons (MT) of highly enriched uranium (HEU) from further use as fissile material in nuclear weapons. This is in addition to the 174 MT of HEU that was removed in the early 1990s from any military use.

- In mid-2006 the United States tabled at the Conference on Disarmament in Geneva a global treaty that would eliminate production of plutonium and HEU for use as fissile material in nuclear warheads.

These accomplishments are helping to realize the President's vision of achieving the lowest possible number of nuclear weapons consistent with national security needs. Moreover, this record of action, coupled with the great progress made in the past two decades in reducing nuclear threats in other areas, demonstrates strong US adherence to its non-proliferation commitments.

[2] See the Attachment for a more comprehensive assessment.

ATTACHMENT

US Progress Towards Meeting its NPT Article VI Commitment

Over the past 20 years, the United States has made remarkable progress in fulfilling its NPT Article VI commitment. The nuclear arms race has, in fact, been halted. The United States has been reducing its nuclear forces and nuclear-weapon stockpile in a consistent fashion through both unilateral and bilateral initiatives, and working cooperatively with allies and partners to further reduce nuclear threats. In particular:

- The INF Treaty, which entered into force in 1988, eliminated two classes of nuclear delivery vehicles—short-range and intermediate range nuclear missiles.

- In 1991, the United States and its NATO allies unilaterally decided to retire all nuclear artillery shells, all nuclear warheads for short-range ballistic missiles, and all naval nuclear anti-submarine warfare weapons. None of these weapons is deployed today, and all have been dismantled. Since 1988, the US has eliminated more than 13,000 nuclear weapons.

- Also in 1991, the U.S unilaterally:
  - removed all non-strategic nuclear weapons on a day-to-day basis from surface ships, attack submarines, and land-based naval aircraft bases;
  - removed strategic bombers from alert;
  - stood down early the Minuteman II ICBMs scheduled for deactivation under START I;
  - terminated the mobile Peacekeeper and mobile Small ICBM programmes; and
  - terminated the SRAM-II nuclear short-range attack missile.

- In January 1992, further unilateral steps were taken which included:
  - limiting B-2 production to 20 bombers;
  - stopping new production of Peacekeeper ICBMs;
  - canceling the entire Small ICBM programme;

  - ceasing production of W88 Trident SLBM warheads; and
  - halting purchases of advanced cruise missiles.

- The 1994 Nuclear Posture Review (NPR) eliminated the capability to deploy nuclear weapons (bombs and cruise missiles) on surface ships.

- The United States has not enriched uranium for use in nuclear weapons since 1964, nor produced plutonium for nuclear weapons since 1988. Nor do we have plans to produce these materials for use in nuclear weapons in the future.

- Since 1992, the United States has maintained a unilateral moratorium on nuclear testing.

- The START Treaty, which entered into force in December 1994, reduced each side's deployed strategic weapons from well over 10,000 to 6,000 accountable weapons with full reductions implemented, on schedule, at the end of 2001.

- The 2001 NPR articulated a reduced reliance on nuclear forces in achieving US national security objectives in light of a growing ability to achieve these objectives with conventional capabilities, including an increased role for missile defences.

- The NPR also articulated a vision, embodied in the Moscow Treaty, for additional deep reductions to a level of 1,700-2,200 operationally deployed strategic nuclear warheads by 2012. The Treaty entered into force in 2004; the following reductions have already occurred:
  - all 50 Peacekeeper missiles have been deactivated;
  - four Trident missile submarines have been removed from strategic service; and
  - we no longer maintain the ability to return the B-1 bomber to nuclear service.

- Under the START Treaty and the Moscow Treaty, the United States will have decommissioned, over a period of two decades, more than three-quarters of the strategic nuclear warheads attributed to its delivery vehicles.

- In May 2004, in light of the Moscow Treaty reductions, President Bush took steps to reduce the total size of the US nuclear stockpile, including both deployed and non-deployed warheads. By 2012 or sooner, the nuclear stockpile will be reduced by nearly one-half from the 2001 level, resulting in the smallest stockpile in decades. This represents roughly a factor of four reduction since the end of the Cold War.
  - The most dramatic stockpile reduction has been in non-strategic nuclear forces (NSNF), which have unilaterally been reduced to less than one-tenth of Cold War levels.
  - The only nuclear weapons available for deployment that remain in the US stockpile today are those carried by ICBMs, SLBMs, and heavy bombers equipped with gravity bombs and air-launched cruise missiles, as well as non-strategic bombs and currently non-deployed nuclear-tipped sea-launched cruise missiles.

- As a direct result of this stockpile reduction decision, the US announced in November 2005 that it will remove, in future decades, up to 200 MT of HEU from further use as fissile material in nuclear weapons. This is in addition to the 174 MT of HEU removed from defence stocks in 1994.
  - 17.4 MT of excess HEU is being set aside to support fuel assurances for states that refrain from pursuing national enrichment and reprocessing programmes.

- US defence spending on strategic nuclear forces has declined from 7% of the total DoD budget in 1991 to less than 3% today. The development programmes we do have are designed to sustain the safety, reliability, and effectiveness of our remaining forces, and to ensure their continued high quality.

Moreover, our threat reduction cooperation with the nuclear states of the former Soviet Union has made remarkable progress in further reducing nuclear threats. Among other things:

- We assisted Ukraine, Kazakhstan and Belarus in becoming non-nuclear-weapon States.

- We have worked together with Russia to eliminate (as of December 2005):
  - 29 Russian strategic ballistic missile submarines with 436 SLBM launchers,
  - 485 ICBM silo launchers and 55 mobile launchers, and
  - 152 strategic bombers.

- In all, nearly 7,000 former Soviet nuclear warheads have been deactivated.

- As of 2006, we have improved physical security at 21 Russian permanent nuclear-weapon storage sites. We are in the process of enhancing security at sites where warheads are stored temporarily, and have assisted in the transport of several thousand nuclear warheads to dismantlement or centralized storage facilities. By the end of 2008, we will have upgraded and modernized security at an additional 19 permanent storage sites. Russia has requested assistance for all of these sites.

- We have accelerated by two years, to 2008, the timeline for securing hundreds of metric tons of HEU and weapons-grade plutonium at 52 sites in Russia and the states of the former Soviet Union (FSU). This will include, by 2008, strengthened security for 227 buildings containing weapons-usable nuclear materials throughout the Russian weapons complex, both civilian and military, as well as the civil nuclear complex.

- Security upgrades to all 50 Russian navy nuclear sites with nuclear weapons or materials were completed in 2006, two years ahead of schedule.

- We have employed over 13,000 former weapons scientists at 180 institutes across the FSU in non-military, commercial pursuits.

- We have converted over 550,000 square feet of floor space of Russia's nuclear-weapon complex to civilian industry. Nuclear-weapon assembly at the Avangard plant was shut down ahead of schedule, reducing to three the number of such facilities in Russia.

- We have let contracts to facilitate the shut down of Russia's last three plutonium-producing reactors at Seversk and Zeleznogorsk by replacing those reactors with fossil fuel plants.

- We have committed to down blending more than 500 MT of HEU from Russia's dismantled nuclear weapons for use in US nuclear power plants. More than half of this material has been down blended to date—enough material for about 10,000 nuclear weapons.

- We are working with Russia to permanently dispose of 34 metric tons of Russia's surplus weapon-grade plutonium by irradiating it as fuel in nuclear reactors.

Finally, we have signed the IAEA Additional Protocol and President Bush submitted it to the Senate in May 2002 for ratification. We are encouraging other states to sign and adhere to the Additional Protocol.

US NUCLEAR POLICY AND STRATEGY AND THE NPT REGIME: IMPLICATIONS FOR NATO

Thomas K. SCHEBER[1]

Conflict in the world today has been described by some as a clash between agents of order and agents of disorder. In this model, countries that seek to establish and enforce norms of behavior among nations are representative of those that seek order. Countries or groups that work to subvert or circumvent established norms—sometimes through violent means—characterize agents of disorder.

In this framework, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is viewed as a product of the agents of order. This widely subscribed treaty—in force for more than 35 years—put in place standards, procedures, and inspections regarding nuclear technology.

Some strong supporters of the NPT who likely consider themselves in the camp of the agents of order have been critical of the United States for its nuclear-weapon policies, in particular the Bush Administration strategy outlined in its December 2001 Nuclear Posture Review (NPR). However, much of the criticism of the NPR is based on logic from an outdated Cold War model and errant characterizations of the new US strategy in the media.[2] Those that support the goals of the NPT and seek to limit nuclear proliferation, as well as proliferation of other weapons of mass destruction (WMD), should take a closer look at

[1] From May 2003 through September 2006, Thomas Scheber served as the Director for Strike Policy and Integration in the Office of the Secretary of Defense. He is currently a Senior Scholar at the National Institute for Public Policy in Fairfax, Virginia.

[2] For an excellent discussion of how critics of the NPR have misapplied Cold War logic that is no longer relevant, see *The Nuclear Posture Review: Setting The Record Straight*, by Keith B. Payne (United States Nuclear Strategy Forum, 2005).

the new US strategy. This paper concludes that supporters of the NPT should find a lot to like about the new US strategy. Important questions addressed in this paper include: Why did the Bush Administration adopt a new strategy for its strategic forces? What is the new strategy? Why should those who seek to limit the proliferation of nuclear weapons, as well as proliferation of other types of weapons of mass destruction, find the new US strategy attractive?

US Nuclear Policy and Strategy

In early 2002, US officials announced the findings of the recently completed Nuclear Posture Review. The NPR report addressed much more than the nuclear-weapon posture—it outlined an approach to bury the Cold War paradigm and transform the strategic force posture of the United States to meet the challenges of the twenty-first century. The basic tenets of the new US strategy are widely available as a matter of public record.[3] Unfortunately, most of the media reporting—especially on nuclear-weapon issues—has been inaccurate, misleading, and sometimes sensationalist.

What compelled the US to adopt a new approach?

The motivations for the change of strategy and the strategy itself can be explained simply—as easy as ABC.

A: Since the end of the Cold War the global security environment has been transformed.

B: US strategic capabilities, designed for Cold War missions and a global security environment that no longer exists, must be transformed accordingly.

C: Nuclear weapons, formerly the central element of the Cold War-era strategic posture, are now one of several elements needed for the

[3] The official, unclassified explanations of the new strategy are found in the NPR roll-out briefing of 9 January 2002, by Assistant Secretary of Defense J. D. Crouch; the testimony of Mr. Douglas Feith, Under Secretary of Defense for Policy, to the Senate Armed Services Committee on 14 February 2002; and the 2002 Annual Secretary of Defense Report to Congress (Chapter 7). Two openly available reports provide accurate descriptions of the NPR strategy that are more detailed than the official DoD documents: *The Nuclear Posture Review: How is the "New Triad" New?*, by Kurt Guthe (Center for Strategic and Budgetary Assessments, 2002), and *Understanding American Nuclear Weapons Policy and Strategy*, by David Trachtenberg and Peter Pry (United States Nuclear Strategy Forum, 2005).

future strategic posture; they remain important, but reductions and adjustments are warranted.

The global security environment has been transformed

During the Cold War, deterrence concepts and the US nuclear arsenal were shaped primarily by the struggle with the Soviet Union. Since the end of the Cold War, the strategic landscape has changed significantly.

Russia: The largest successor state to the United States' former Cold War adversary, Russia is not an enemy and does not pose an immediate threat. The US and Russia have formalized a new strategic arms reduction treaty in record time. The May 2002 Moscow Treaty cuts by two-thirds operationally deployed strategic nuclear warheads without any new, Cold War-style verification requirements. Key Russian elites, however, especially in the military and security services, remain suspicious of the motives and policies of the United States. While not an enemy, Russia also is not yet a traditional ally and retains a formidable nuclear force that cannot be ignored.

China: The role of China in the future strategic environment is uncertain.[4] China's rapid rise as a regional political and economic power with global aspirations is an important element of today's strategic environment. Several aspects of China's military development, including the pace and scope of its strategic force expansion and numerous nuclear-weapon development programmes, are of concern. Chinese leaders have not adequately explained the purposes or desired end states of their military expansion. The Department of Defense report on the 2006 Quadrennial Defense Review states concerns about the potential of China to "compete militarily with the United States and field disruptive military technologies that could over time offset traditional US military advantages."[5]

[4] For a more detailed account of US concerns regarding military trends in China, see the Department of Defense 2006 *Annual Report on the Military Power of the People's Republic of China.*
[5] US Department of Defense, *Quadrennial Defense Review Report*, 6 February 2006, p. 29.

Rogue states: Leaders of these WMD-armed countries pose a growing threat. For these leaders, nuclear, chemical, and biological weapons provide a means to offset US superiority in conventional military capabilities. WMD possession by these states may be intended to make the United States and its allies reluctant to intervene in regional conflicts, and threatened US allies reluctant to stand firm against coercion or aggression.

Violent extremists and other non-state actors: The attacks of 11 September 2001, demonstrated the potential destructiveness of even a small group of extremists. These attacks, clearly intended to inflict mass casualties among the civilian populace, underscore the importance of keeping weapons of mass destruction out of the hands of such groups. The ongoing struggle to protect innocent people from violent extremists will likely continue for years to come.

Overall: There is great uncertainty regarding the complex strategic environment ahead. The world for which the US Cold War nuclear arsenal was designed bears little resemblance to the contemporary geo-political environment. The most immediate security concerns in the early years of the twenty-first century are not predicated on a rival superpower with a large nuclear arsenal. For the United States, a future nuclear confrontation with Russia or possibly China cannot be ruled out, but appears less immediate than the challenges now posed by violent non-state actors and rogue states with WMD. For the near-term, the nexus of WMD-armed rogue states and violent extremists may pose the most dangerous threats to the United States and its allies.

US strategic capabilities must be transformed accordingly

The Cold War and the accompanying arms competition are over. During the Cold War, political leaders on both sides came to the conclusion that a nuclear war was un-winnable. However, we cannot assume that future WMD-armed adversaries will come to a similar conclusion. The dynamics of deterrence have changed.

In the contemporary environment, deterrence of WMD-armed adversaries is important, but deterrence is also uncertain. Deterrence is

important because of the potential for such weapons to cause an extremely large number of casualties and because chemical and biological weapons are most effective when used against personnel. Therefore, we must be concerned that these weapons could be used against civilian populations—with deadly consequences.[6]

Adversary leaders may be difficult to deter when we lack comprehensive insight into their decision-making calculus and core values. In order to tailor deterrence strategies for each country, leader, and situation it will be important to understand how these leaders receive and interpret information and how they make decisions. Effective communications with these leaders may be challenging. Leaders of rogue states may not be skilled in communicating with Western powers or in thinking about the long-term consequences of use of even a single nuclear weapon. Tailoring deterrence strategies for the range of potential adversaries in the decades ahead is a much more complex task than the comparable Cold War task that, over several decades, focused primarily on deterring a single adversary.

Even with our best efforts, deterrence may not succeed. Ruthless leaders of WMD-armed rogue states could conclude that they have nothing to lose if they believe that their survival is at stake. Adversary leaders may be hard-line extremists, driven by an ideology that glorifies death in pursuit of a cause.[7] Once a conflict appears imminent, they may seek to cause as much destruction to others as possible without regard for the cost to their country or its citizens.

Deterrence, where feasible, may not depend solely on an adversary's fear of a nuclear response. Even if an adversary fears a nuclear response, the threat of such a response to the adversary's aggression may not be sufficiently credible to deter adversaries in all

[6] For example, a single chemical weapon loaded with VX nerve agent could inflict tens of thousands of fatalities on a densely populated city.

[7] Bernard Lewis provides a concise summary of such thinking in his article "August 22" that appeared in the *Wall Street Journal* on August 8, 2006. "In this context [the apocalyptic world view of Iran's present leaders], mutual assured destruction, the deterrent that worked so well during the Cold War, would have no meaning. At the end of time, there will be general destruction anyway. What will matter will be the final destination of the dead—hell for the infidels, and heaven for the believers. For people with this mindset, MAD is not a constraint; it is an inducement."

potential WMD-related scenarios. In this new environment, reliance on offensive nuclear weapons alone for deterrence is no longer sufficient. A more diverse set of strategic capabilities—including a range of offensive and defensive capabilities—is needed to provide appropriate and effective military capabilities should deterrence fail. Technological advances, especially in non-nuclear capabilities, now provide valuable options for both offensive and defensive missions. In some cases these new capabilities may provide the added bonus of strengthening deterrence.

In response to the evolving global environment, the US is developing a broader range of strategic capabilities comprised of the following:

- Offensive capabilities that include nuclear, non-nuclear, and non-kinetic strike capabilities.
- Defensive capabilities that include ballistic missile defence, air and cruise missile defence, and various other defences.
- A revitalized research and production infrastructure that will enable the US to adapt offensive and defensive capabilities quickly to respond to evolving threats.

The NPR coins the term "New Triad" for this new portfolio of strategic capabilities. Improved intelligence, planning and command and control will also be needed to integrate New Triad capabilities.

Nuclear weapons remain important

Why nuclear weapons? The NPR calls for a smaller nuclear arsenal. As noted earlier, the NPR calls for reduced reliance on nuclear weapons to underpin deterrence. However, safe and reliable nuclear weapons will continue to be important in the US National Security Strategy. Non-nuclear weapons cannot hold at risk the full range of facilities of most value to potential adversaries, and are not sufficiently effective in all cases to deter WMD-armed enemies or to reassure threatened allies. If the United States eliminated its nuclear arsenal or reduced it to a very small number of weapons:

- The US and its allies would be vulnerable to coercion by adversaries armed with WMD and delivery systems capable of causing unimaginable damage and destruction.
- Countries seeking WMD to coerce the US and its allies from protecting their common interests in key regions could be emboldened to invest more aggressively in WMD and delivery capabilities.
- The US would not be able to meet its extended deterrence commitments to allies. Allies in dangerous regions might then be compelled to acquire their own nuclear arsenals.

To deal with the most severe threats in the unpredictable years ahead, nuclear weapons will continue to serve an important role in the US strategic posture. They support deterrence and their effects cannot be duplicated by non-nuclear capabilities.

How many nuclear weapons are needed? As a result of the new strategy in the NPR, the US no longer sizes its nuclear forces using a potential conflict with Russia as a yardstick. In May 2001, President Bush stated that the US would reduce its nuclear arsenal to the lowest possible level, consistent with the security needs of the US and its allies. Later that year, reflecting the end of the Cold War and the new geo-political environment, President Bush announced the specifics of his plan for nuclear reductions—that the US would unilaterally reduce, by two-thirds, its deployed strategic nuclear forces (i.e., those readily available in hours to days). Russian President Putin made a similar announcement shortly thereafter, and in May 2002, the US and Russia formalized these commitments in the Moscow Treaty.

Some have noted the dramatic reductions underway in the US and called for even deeper cuts. However, the US strategy explicitly calls for caution that the US not reduce its nuclear forces to levels that would cause allies to question long-standing commitments to extended deterrence,[8] or to levels that might incentivize bad behavior from, or nuclear buildups by, potential adversaries.

[8] For example, key US allies in high threat regions include Japan. On 5 September 2006, the Institute for International Policy Studies, headed by former Japanese Prime Minister Nakasone, issued a report entitled "An Image of Japan in the 21st century." The report noted the potential for tremendous future change in the international situation. Former Japanese Prime Minister Nakasone, when questioned by

The nuclear arsenal needs to be safe, reliable, credible, and appropriate for countering twenty-first century threats. Retention of part of the Cold War arsenal is appropriate to deter some adversaries, dissuade challengers, and assure allies. Additionally, transformation of a portion of the downsized arsenal will be needed to make nuclear strike capabilities more credible in the emerging environment and thereby strengthen deterrence.

What progress has the US made in implementing the new strategy?

Periodically, US officials have briefed NATO counterparts on progress on the dual-track NPR implementation plan to: 1) develop and deploy a New Triad; and, 2) reduce numbers of nuclear weapons. Below is a short summary of progress to date.

Progress on the New Triad

Non-nuclear Strike Capabilities[9]: The US is developing a new generation of non-nuclear strike weapons that are more precise, more lethal, and with longer range than previous weapons. In 2006 the US deployed two new weapon systems that provide improved conventional strike capabilities: The Joint Air-to-Surface Strike Missile (JASSM), and a next-generation tactical Tomahawk cruise missile (TacTOM). The US is also converting 4 ballistic missile submarines to cruise missile submarines (SSGNs) that will carry the new TacTOM and other cruise missiles—as well as Special Forces. In 2007, the conversion of the first two SSGNs will be complete and preparations will begin for their deployment. In addition, the US has initiated a programme to develop conventionally-armed ballistic missiles. The purpose of such long-range conventional weapons is to be able to disrupt adversary actions in high stakes scenarios in which the use of nuclear weapons might not be appropriate. However, the initial proposal that would have replaced

---

the press on the report, noted that Japan was currently dependent on US nuclear weapons but it is unknown whether US policy will remain unchanged.

[9] For a more detailed description of US planning to improve strategic strike capabilities see the Department of Defense Report to Congress, "Prompt Global Strike Plan" (June 2005).

nuclear warheads on a limited number of Trident missiles with precision conventional warheads has been sidetracked by the Congress.

Nuclear Strike Capabilities: The NPR called for studies to examine how best to adapt the extant nuclear force to meet the needs of the twenty first century. Efforts to study options to modify existing nuclear-weapon capabilities have been controversial in the United States and, to date, the Congress has denied administration requests to fund such studies. In 2005 the Congress directed the Department of Defence to establish a commission to examine the options for the future strategic force posture and to report its findings in late 2007. As a result of the lack of consensus in the US on the types of nuclear weapons needed for the future, there are no programmes currently underway to modify the existing nuclear arsenal to improve nuclear-weapon capabilities.

Ballistic Missile Defence Capabilities: The first phase of a ballistic missile defence capability is in place. This initial capability includes ground-based mid-course interceptors, sea-based SM-3 mid-course interceptors, and Patriot Advanced Capability (PAC-3) missiles for terminal defence, as well as radars and other capabilities for command and control. The US is continuing to make improvements in both capability and capacity. These defences will strengthen deterrence by denying WMD-armed adversaries the ability to exploit the vulnerability of the United States and its allies to ballistic missile attack.

Responsive infrastructure: The nuclear warhead infrastructure in the US is badly in need of modernization. A newly developed nuclear warhead has not been produced and deployed since 1989. The programme to develop a Reliable Replacement Warhead will enable the US to modernize and streamline the nuclear infrastructure while upgrading the safety and reliability of its nuclear arsenal.

The emerging portfolio of New Triad capabilities—which includes a smaller nuclear arsenal—will provide a range of capabilities and options needed for the spectrum of potential contingencies in the twenty first century. These new capabilities will enable the US to continue to honor its extended deterrence guarantees effectively in this

new environment. These guarantees are an important element of the US strategy to combat WMD and support non-proliferation goals.

Progress on Nuclear Reductions: The findings of the Nuclear Posture Review of December 2001 included a two-thirds reduction in deployed warheads for the strategic nuclear force by 2012. To meet that goal, US leaders set an interim milestone for nuclear reductions—to be at or below 3,800 operationally deployed strategic warheads by the end of September 2007. The US arsenal was in fact reduced below that level a full year ahead of schedule.

All 50 Peacekeeper ICBMs have been retired, four ballistic missile submarines have been removed from strategic service (and converted to cruise missile submarines), and B-1 bombers have been permanently removed from the nuclear-capable force. In addition to the reductions in the deployed nuclear force, the US will cut its stockpile of nuclear warheads approximately in half by 2012.

During the Quadrennial Defense Review concluded in February 2006, US officials reviewed progress on the New Triad and plans for the extant nuclear force. They decided to make an additional ten percent reduction in the Minuteman ICBM force – from 500 ICBMs to 450 – and to reduce the number of B-52 heavy bombers (from 94 to 56).

What has not changed?

Some critics of the new US policy and strategy claim that the US has abandoned long-standing precepts and warn of dire consequences. In describing the new thinking behind the NPR strategy, officials sometimes fail to call attention to important elements of policy that have not changed.

Elements of US nuclear policy that provide continuity with the policies of previous administrations and that continue to be relevant in the post-Cold War environment include the following:

- Extended Deterrence Guarantees to Allies: These long-standing commitments remain intact.

- Declaratory Policy: Statements made by Bush Administration officials are almost identical to declaratory policy statements made during previous administrations.[10]
- Nuclear Threshold: The nuclear threshold will remain high and will not be lowered by the new strategy, as some critics have erroneously charged.
- Moratorium on Nuclear Testing: Early in the Bush Administration, senior officials announced that the US would continue its moratorium on nuclear testing.
- Cooperative Threat Reduction (CTR): Over the past decade, the US has provided over $8 billion in non-proliferation and threat reduction assistance to states of the former Soviet Union. Through the CTR programme, the US has helped eliminate almost 900 ballistic missiles, over 100 strategic bombers, and 26 ballistic missile submarines. In addition, the US helped improve physical security at 21 Russian nuclear-weapon storage sites.
- Support for the NPT: The US supports NPT goals and is concerned about recent acts of noncompliance by NPT signatories. To help enforce non-proliferation norms, in 2003 the US launched the Proliferation Security Initiative to complement existing non- and counter-proliferation efforts. Additionally, the US has a strong record of accomplishments toward its Article VI commitments. At the 2005 NPT Review Conference, US Ambassador Jackie Sanders summarized these accomplishments, which include the following:
  - Dismantled more than 13,000 nuclear warheads since 1988.
  - Reduced warheads accountable under the Strategic Arms Reduction Treaty from over 10,000 (in 1991) to less than 6,000 (in 2002). In addition, the US has begun the process of reducing operationally deployed strategic nuclear warheads from approximately 6,000 in 2002 to 1,700 to 2,200 by 2012.
  - Initiated deep reductions (about 50%) in its nuclear warhead stockpile to be completed by 2012.

[10] Consider the following two statements: Secretary of Defense William Perry in 1996: "Anyone who considers using a weapon of mass destruction against the United States or its allies must first consider the consequences. We would not specify in advance what our response would be, but it would be both overwhelming and devastating." National Security Advisor Condoleezza Rice, March 2002: "We want to send a very strong signal to anyone who might try to use weapons of mass destruction … The only way to deter such use is to be clear that it would be met with a devastating response."

- Eliminated 1,032 launchers from intercontinental and submarine-launched ballistic missiles.
- Eliminated 350 heavy bombers and 28 ballistic missile submarines.
- Achieved full implementation of its 1991-1992 Presidential Nuclear Initiative commitments.
- Reduced nuclear weapons deployed to Europe. In 1991, the United States based five different types of nuclear weapons in NATO Europe. Of the five types of weapons, only one remains in Europe today.

How does the new US strategy support nuclear non-proliferation goals?[11]

The two track approach continues to support established norms (order) that remain appropriate in the new environment while developing the means to deal with the emerging agents of disorder.

- A new portfolio of strategic capabilities (the New Triad) will reduce the potential value of WMD to adversaries, will help strengthen deterrence, and will provide a spectrum of offensive and defensive capabilities to deal effectively and appropriately with those that choose to sow disorder.
- Significant nuclear reductions are underway and on track. A downsized and modified nuclear force, an element of the New Triad, will be important to assure allies, dissuade challenges, and deter the most severe threats.

Implications for NATO

It is important for the NATO alliance to prepare for the spectrum of security challenges that may lie ahead. If the efforts of those that seek to foment disorder are not blunted, threats to alliance members will continue to increase.

At present, North Korea and Iran—potentially in combination with non-state actors—represent the most serious near-term dangers for alliance members. North Korea continues to defy the international

[11] See Chapter V of the March 2006 US *National Security Strategy*, "Prevent Our Enemies From Threatening Us, Our Allies, And Our Friends With Weapons Of Mass Destruction."

community and destabilize its region. North Korean leaders now boast of a small nuclear arsenal and an illicit nuclear programme in violation of Pyongyang's international obligations. Iran has violated its NPT safeguards obligations and refuses to provide objective guarantees that its nuclear programme is solely for peaceful purposes. Not only are North Korea and Iran already in possession of, and continuing to develop, dangerous weapons that can be used to threaten other states directly, but they have demonstrated a willingness to transfer dangerous weapons to others—both state and non-state actors.

The current leaders of North Korea and Iran are agents of disorder. They have undermined the NPT regime, subverted its civil technologies for military applications, and continue to ignore UN Security Council resolutions. It will be important to terminate the nuclear-weapon programmes in these countries. Failure to do so would undermine further the credibility of the NPT regime, encourage similar disruptive behavior from others, and might compel some countries that are currently complying with their obligations to forego nuclear-weapon arsenals to reconsider.[12]

As the NATO alliance works to secure its defence and as an agent of order, it may continue to be called on to conduct "out of area" operations. Future "out of area" operations by NATO forces may need to be conducted in WMD threat environments. For such situations, NATO will need to have effective capabilities to deter WMD-armed adversaries where feasible, and to defend itself and respond to WMD use should deterrence fail.

WMD-armed countries with aggressive leaders may be deterred by credible threats to their survival or uncertainty over the survivability and effectiveness of their own WMD-armed forces. Adjustments and modernization of the extant nuclear force will be needed to strengthen the credibility of the NATO deterrent. However, there is no certainty that deterrence will be feasible in all circumstances in the future. Therefore,

[12] The report, "An Image of Japan in the 21st Century," included the following statement: "Japan, maintaining its position as a non-nuclear weapons state and working to strengthen the Nuclear Non-Proliferation Treaty system, should study the nuclear issue in order to be prepared in the event of tremendous future change in the international situation."

the Alliance will need both effective offensive and defensive capabilities to provide a range of options in rapidly changing, high stakes situations.

To best serve NATO interests, a balanced approach is needed to support appropriate international norms (order) while, at the same time, dealing effectively with those that reject these norms and seek to foment disorder.

The current US approach seems to be appropriate to help support a balanced strategy for the Alliance in the emerging security environment. New Triad capabilities are being developed to strengthen deterrence, discourage would-be proliferators from investing in threatening capabilities, and provide effective capabilities should deterrence fail. At the same time, the US is pursuing prudent nuclear reductions in an orderly manner.

Conclusion

In summary, much has changed regarding the US nuclear-weapon policy and strategy.

- **A:** The changes are motivated by the dramatic transformation of the global security environment since the end of the Cold War.
- **B:** US leaders have put in place a plan to transform US strategic capabilities accordingly—a New Triad with reduced reliance on nuclear weapons.
- **C:** A downsized arsenal of safe, reliable, credible nuclear weapons will remain an important element of US strategic capabilities.

While much has changed, many important aspects of US nuclear policy have endured in the most sweeping transformation of nuclear policy in over four decades.

The new US plan for strategic capabilities supports non-proliferation goals, provides appropriate capabilities to prevent enemies from threatening the United States, its allies and friends with WMD, and strengthens deterrence in the new strategic environment.

NATO AND THE NUCLEAR NON-PROLIFERATION REGIME

Bruno TERTRAIS[1]

This paper first considers the implications of the existence of NATO for the nuclear non-proliferation regime, and then examines the implications for NATO of possible future nuclear scenarios.

NATO and the Nuclear Non-Proliferation Regime

Any discussion about the relationship between the North Atlantic Treaty Organization, nuclear non-proliferation and nuclear disarmament should begin with the recognition of two basic facts. One is that as a multilateral organization, NATO is not a party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and thus as an institution is not bound by of the commitments made by the member states. Criticisms by non-governmental organizations (NGOs) about the alleged lack of implementation by "NATO" of various NPT-related texts miss this simple point.[2] Another fact is that NATO is in itself a non-proliferation instrument. The Article 5 commitment and the nuclear umbrella provided by the United States, the United Kingdom, as well as France to some extent, amount to a positive security guarantee that serves to dissuade nuclear temptations.

---

[1] Senior Research Fellow, Fondation pour la Recherche Stratégique, Paris.

[2] See, for example, Arjun Makhijani and Nicole Deller, *NATO and Nuclear Disarmament: An Analysis of the Obligations of the NATO Allies of the United States under the Nuclear Non-Proliferation Treaty and the Comprehensive Test Ban Treaty,* Institute for Energy and Environmental Research, October 2003; and Sarah Yeomans, *NATO and the NPT since 2000. Progress toward the 13 Steps outlined by the 2000 NPT Review Conference,* Center for European Security and Disarmament Briefing Paper, April 2002.

There has been a longstanding challenge to the legality of NATO nuclear-sharing arrangements by some NGOs.[3] However, during the NPT ratification debate (1968), the US State Department informed the US Senate that nuclear sharing did not involve any transfer of weapons or control over such weapons *"unless and until a decision were made to go to war"*, and did not run contrary to Articles I and II.[4] Washington also informed the members of the Eighteen Nation Disarmament Committee of its interpretation. Perhaps more importantly, the negotiators' intent regarding Article I was to exclude a Multi-Lateral Force that would involve non-nuclear fingers on the button (especially, in Soviet eyes at the time, if one such finger was to be German), but not nuclear-sharing *per se*. In fact, such arrangements already existed between the US and other NATO countries. The NATO International Secretariat thus argues that *"the Alliance's arrangements for basing U.S. gravity bombs in Europe are in compliance with the NPT. When the Treaty was negotiated, these arrangements were already in place. Their nature was made clear to key delegations and subsequently made public. They were not challenged."*[5]

Critics have also pointed out that NATO's continued reliance on the option of nuclear first use runs contrary to the principle of "a diminishing role for nuclear weapons in security policies" included in the 2000 NPT Review Conference Document. However, NATO points out that the circumstances where the Allies may consider the use of nuclear weapons are now "extremely remote". It is hard to imagine how the place of nuclear weapons in NATO strategy could be further reduced without fundamentally altering its very nature. In addition, it should be noted that radical steps such as the abandonment of the nuclear protection given by the United States, the United Kingdom, and France might in fact increase the risk of nuclear proliferation within the Alliance, thus defeating the very purpose of the NPT. It should also be noted that a stated doctrine of "no-first-use" might increase the risk of chemical or biological weapons

[3] See in particular Martin Butcher, Otfried Nassauer, Tanya Padberg & Dan Plesch, *Questions of Command and Control: NATO, Nuclear Sharing and the NPT,* PENN Research Report, 2000.

[4] This curious (and legally controversial) provision may have been necessary in the past, but is perhaps irrelevant today. Modern command, control and communications arrangements might preclude a non-nuclear country from actually "controlling" the use of an American nuclear weapon.

[5] NATO International Secretariat, *NATO's Positions Regarding Nuclear Non-Proliferation, Arms Control and Disarmament and Related Issues,* Last updated: 20 June 2005.

use by an adversary, and perhaps even the risk of aggression itself; this would run counter to the principle of "undiminished security for all" affirmed by Step 9 of the 2000 document.

Because the US nuclear presence in Europe is collectively managed, NATO has been able to contribute directly to nuclear disarmament. Only one US system remains in Europe today (as compared with 11 in 1971). NATO's stockpile has been reduced by over 85per cent since 1991 (almost 95per cent since the height of the Cold War), including a reduction of well over 50per cent of its nuclear bombs. The number of nuclear storage sites has been reduced by about 80per cent. The number of NATO's dual-capable aircraft has been reduced by about two-thirds, and their readiness levels have been reduced to what can be considered an operational minimum (a duration measured in months).[6] These measures have not had any impact on proliferation. For instance, did the reported reduction in the number of US nuclear weapons in Turkey make any difference on Iran's nuclear programme? Obviously not. That is because Iran's drive for nuclear weapons is not determined (or only marginally so) by the existence of US nuclear weapons, and even less by the presence of such weapons in its neighbourhood.

Implications for NATO of Four Nuclear Scenarios

Let us now envision four possible nuclear scenarios for the next few years which may have serious consequences for NATO as a military organization. They are presented here in decreasing order of probability.

A Nuclear-Capable Iran. Failure to dissuade Iran from building a nuclear capability would have serious consequences for the Alliance. It would amount to the emergence of a second nuclear-armed country on its borders. Obviously the existence of a NATO nuclear capability would then be considered an asset to be preserved by many, if not all, members. Calls for the speedy deployment of territorial missile defence on the continent would also be heard. If there was a severe degradation of the relationship between Turkey and Iran, including the prospect of armed

[6] NATO International Secretariat, *NATO's Nuclear Forces in the New Security Environment*, Last updated: 19 July 2005; and ibid., *NATO's Positions Regarding Nuclear Non-Proliferation, Arms Control and Disarmament and Related Issues,* Last updated: 20 June 2005.

conflict, and if there was a Western consensus on the unacceptability of a nuclear-armed Iran, NATO might even be expected to plan for a preventive or pre-emptive strike against Tehran's nuclear facilities. Note also that voices would be heard in Turkey calling for the consideration of a national nuclear capability if the Alliance's nuclear umbrella was considered unreliable. To avoid such a severe crisis both for NATO *and* the NPT, it would be critical for all Alliance members to reaffirm their defence commitment to Ankara. Given the doubts that many Turks have about the willingness of NATO nations to defend Turkey in light of the experience of recent crises (1991and 2003), a solemn declaration by all NATO members to that effect would be in order. Finally, if Iran was to go overtly nuclear, the risks of an unravelling of the NPT would be serious. In such a case, all the consequences mentioned above would be magnified.

Further National Nuclear Reductions. Further nuclear-weapon reductions would be unlikely to have a serious impact on NATO. It is hard to imagine how any politically conceivable unilateral reduction of the total or operational stockpiles held by the Alliance nuclear members would make them less able to maintain extended deterrence in today's environment. Likewise, it is unlikely that the possible reduction of Russian nuclear forces would seriously affect the perception of risks in contingency planning in Europe and NATO for a crisis on its eastern borders. There would be one exception –if Moscow or Washington decided to extend arms control to the area of so-called "non-strategic" nuclear weapons. However, this is not a realistic prospect for now, and it is in any case unlikely that a START-like agreement could ever be devised in this field, if only for verification reasons. At the extreme, the United States and Russia might be tempted to consider a ban on US and Russian nuclear weapons in the Atlantic-to-the-Urals area, but this would also present grave verification problems.

A Demand by a Host Nation for the Withdrawal of US Nuclear Forces. It is possible that a NATO host nation might demand the withdrawal of the US nuclear forces stationed on its territory. The Greek precedent would prevent other NATO members from asserting that such a withdrawal would necessarily lead to an unravelling of the whole nuclear-sharing arrangement. Such a demand would in all likelihood be

driven by domestic political and "sovereignty" considerations. (Some European political leaders have called for the withdrawal of US weapons in recent years, and public opinion in host countries tends to have negative views of this nuclear presence.[7]) The deployment of missile defences in Europe may be used as an argument to claim that such a presence is no longer necessary. In such a scenario, NATO would have to consider that there could then be a "domino effect" and that other nations would follow suit – especially if the initial demand was made publicly, as it probably would be if it was driven by domestic political considerations. There is also the possibility that one or several NATO nations might refuse to give a nuclear role to the Eurofighter (Typhoon) aircraft, which is due to be the successor to the F-16 in several NATO nations. This might be for such countries a "soft" way to put an end to their nuclear-sharing role, even though US nuclear forces could remain on the territory of some European countries for US use. (NATO is believed to currently maintain US nuclear weapons dedicated to US use in four countries: Germany, Italy, Turkey and the United Kingdom. Weapons deployed in Belgium and the Netherlands are dedicated to "host nation" use.)

A "Nuclear Deployment Surprise". One particular nuclear scenario to be considered by the Alliance because of its indirect consequences for NATO is the possibility that a nuclear-capable State might deploy nuclear weapons on the territory of a non-nuclear-weapon State. A scenario in which Pakistan deploys nuclear weapons on Saudi soil has been envisioned by many analysts, and other scenarios could be considered. In the future, China, North Korea, and Iran could be involved in such arrangements. This scenario remains unlikely today but needs to be thought about, not only because of its inherently destabilizing potential, but also because of the potential indirect consequences for NATO. Countries involved would be likely to justify such an action by the existence of the NATO "precedent". This would undoubtedly lead some countries to call for an end to the US nuclear presence in Europe. Critics of NATO arrangements have a point when they say that *"NATO has established a pattern that it does not want others to emulate"*.[8] Since the withdrawal of Soviet weapons from the territory of the USSR's

[7] See *Nuclear Weapons in Europe: Survey Results in Six European Countries,* Strategic Communications, 25 May 2006.
[8] Butcher *et al*., op. cit., p. 25.

former Warsaw Pact allies in the early 1990s and the removal of UK WE-177 bombs from the continent after the end of the Cold War, the United States has been the only nuclear power known to be deploying nuclear weapons on foreign soil.

Food for Thought

The four scenarios suggested above would have diverse consequences for NATO. It is, however, possible to make some suggestions as to how the Alliance should prepare for these possibilities.

Maintain nuclear umbrellas and nuclear-sharing arrangements. The possibility of a renewal of nuclear proliferation in NATO's neighbourhood is real; and it is possible that the nuclear dimension of the Alliance's war prevention strategy will gain in importance in the future. NATO may have to demonstrate that the deployment of territorial missile defences on the European continent will not be a replacement for nuclear deterrence, but rather a complement. A further reduction in the role of nuclear weapons in NATO policy, viewed by many NPT members as a desirable step, should be regarded with caution, since (as suggested above) it could lead to unwanted effects: it is an area where gains would be limited and losses would be almost certain. Nuclear-sharing procedures should also be maintained. They offer concreteness to the US nuclear umbrella and give non-nuclear allies a modicum of "nuclear culture".

Think again about the costs and benefits of a permanent US nuclear presence. NATO also needs to think in advance about the political or strategic scenarios that might put into question the permanent US nuclear presence in Europe. While there are undoubtedly benefits in the "let the sleeping dogs lie" attitude which has prevailed throughout the Alliance on this matter since the end of the Cold War, it is not certain that such an attitude will remain appropriate. NATO should not necessarily be proactive, but it needs to be ready to react when and if appropriate circumstances arise. A withdrawal of US nuclear weapons from Europe should not be a unilateral gesture – such a move would be unlikely to have clear diplomatic or military benefits. It would have to be part of a broader strategic negotiation. One option would be a bilateral norm with

Russia in the framework of a new arms control agreement. But a much better option in terms of potential benefits would be the promotion of a new global norm of "no nuclear weapons on foreign soil", which could be discussed in the run-up to the next NPT Review Conference, scheduled for 2010.[9] Of course, there would be significant drawbacks in such a withdrawal. It might foster the perception of a weakening of the Alliance guarantee, and it would lead to a loss of nuclear culture among non-nuclear NATO members. Perhaps the withdrawal of US nuclear weapons from Turkey might even encourage the Iranians in their quest for nuclear weapons. A particular drawback of a global norm is that it would prevent the United States from deploying nuclear weapons on the territory of other countries if need be – for instance, in the Middle East or Asia. But there could be middle-ground options. One would be to terminate only the "permanent" deployment of US warheads (but maintain the vaults and leave the option open of a re-deployment in crisis time). The disadvantages of such a hypothetical solution would include the risk that no crisis redeployment could take place for fear of deepening the crisis, and the risk that the allies would not maintain nuclear-certified aircraft and aircrews without the presence of US nuclear weapons. Another would be to ban the presence of nuclear weapons on the soil of non-nuclear-weapon states, thus leaving a symbolic US nuclear presence in the United Kingdom. In any case, the permanent presence of several hundred US nuclear weapons in several non-nuclear-weapon states in Europe, both for US and allied use, will need to be constantly reviewed and be the object of serious costs-and-benefits analysis.[10]

Consider a legal ban on battlefield-dedicated nuclear weapons. Finally, if Russia and the Alliance were considering arms control moves in the field of non-strategic nuclear weapons, a possible option which would not affect NATO nuclear sharing arrangements would be to agree on a formal ban on short-range, ground-launched nuclear weapons of less than 500 kilometres (For good measure, it should also cover static systems – that is, Atomic Demolition Munitions.) This would be an alternative to the "codification" of the 1991-1992 US and Russian

[9] A similar concept has been proposed by the WMD Commission. See *Weapons of Terror. The WMDC Report,* Stockholm, 2006, p. 98.

[10] If Turkey was to seriously consider a nuclear option despite US protection, a withdrawal of US weapons would also stop nuclear training for the Turkish military. In such a (very hypothetical) scenario, this would be a positive gesture.

Presidential Nuclear Initiatives (PNIs) called for by some NATO members. As an additional confidence-building measure, France and the United Kingdom could declare that they consider themselves bound by the provisions of the Intermediate-Range Nuclear Forces (INF) Treaty.

THE NUCLEAR PROLIFERATION SCENE: IMPLICATIONS FOR NATO

Michael QUINLAN[1]

I take it as given that the non-proliferation regime remains a very important and good thing; that it is not in inexorable terminal decline, or on the edge of a precipice; but that there are both general and particular dangers to it, as we saw for example in the fiasco of the NPT review conference in 2005 and, more concretely, in the problems posed very conspicuously by Iran and, perhaps slightly less urgently though no less profoundly, by North Korea. The practical questions for our Alliance then are what it can do to help reduce or manage the dangers, and what it can do to help prevent the emergence of new ones.

At the level of general threats, I distinguish (though they are by no means tidily separate) between aspects of regime legitimacy and acceptance, and aspects of practical regime working.

Legitimacy and acceptance matter not just because in the international system *pacta sunt servanda,* but because the regime imposes constraints, obligations, and sometimes significant costs on many if not most parties, and legitimacy is necessary in order to sustain willingness to bear these burdens. That is especially so where substantial sacrifices become necessary for deterrence or enforcement against prospective or actual breaches. If legitimacy is impaired, willingness may decline, excuses may become more tempting and easier to find, and deterrence may be weakened.

[1] Consulting Senior Fellow at the International Institute for Strategic Studies, London, and formerly Permanent Under-Secretary of State, Ministry of Defence, London.

I see at present three main potential threats to regime legitimacy:

First, that implementation may be perceived as not being universally rigorous, consistent, and fair. I have to say that the recent US/India deal, though I understand the arguments in its favour, gives me some disquiet in this regard.

Second, that it may be thought that the nuclear-energy part of the NPT bargain is not being adequately fulfilled. (I comment no further on this – it is not my field of expertise.)

Third, that it may be felt that obligations under Article VI of the Treaty are not being properly honoured by the nuclear-weapon states (NWS). I am well aware – and we should perhaps remind people more often – that the NPT is not just a bargain between NWS and non-nuclear-weapon states (NNWS); it is also, and very importantly, a bargain among the NNWS themselves to protect them from the risks and costs of nuclear arms racing among them. But there *is* an NWS-NNWS bargain, and its observance matters. I want now mostly to talk about what NATO members and NATO itself are doing, and what more they might do, in relation to this NWS-NNWS bargain. I suggest that there are issues of doctrine and philosophy; of weapon types and numbers; of weapon deployment; and of the arms control agenda.

One recurrent question is whether NATO should modify the nuclear elements of its strategic concept, either for military reasons in face of new security challenges or as a political gesture towards reducing the perceived salience of nuclear weapons, in the spirit of Article VI, so as to reinforce the sense of worldwide legitimacy in the regime. I am very doubtful that there is any useful mileage in this, and not just because of the familiar internal difficulties of agreeing what the changes might be. I do not believe that NATO need or should leave its nuclear doctrine behind when it goes "out of area", as I imagine and indeed hope it is increasingly likely to do. The likelihood of nuclear doctrine coming into play does indeed look very remote, but it is not impossible – especially if there are major non-proliferation setbacks, for example in relation to Iran – in which it might still be salutary to ensure that adversaries keep in mind that NATO forces have this final sanction behind them. More

specifically, I have never seen merit in promises of 'no first use' – such promises are in the last analysis mere window-dressing that cannot change reality – and I do not believe that such window-dressing would be of any more political value now than in the past. Similarly, I see no ground for attempting to widen the formal ambit of the negative security assurances (NSAs) already given by NATO's nuclear members to non-nuclear parties to the NPT, though at the same time I do believe that trying actually to narrow their ambit in any formal way – for example, by explicitly withdrawing their protection from any state that uses biological and chemical weapons – would be neither necessary nor politically helpful. In that last regard the underlying truth is that nuclear weapons already provide existential deterrence irrespective of what doctrine may or may not say. No adversary state contemplating large-scale biological or chemical attack could ever afford to assume that if a nuclear response was the only effective course available to the victim of attack, peacetime declarations would provide protection from it. There is no need to run the political risks of opening up a contentious new international debate about NSAs.

In brief, I see no need for altering doctrine whether or not proliferation continues. But I turn now to the issue of new nuclear weapons for our armouries; and I find that rather less straightforward. Let me first draw a distinction between new weapons to replace old or obsolete ones, and new weapons for new tasks – roughly speaking, the difference, I believe, between *neuf* and *nouveau* in French. There clearly have to be replacement weapons. We are nowhere near achieving a global environment in which benign political developments worldwide will any time soon have dependably ensured, to everyone's satisfaction and trust, the maintenance by other means of the enormous security benefits which nuclear weapons have conferred on the world for these past sixty years. We are therefore not realistically in sight of the total abolition to which the nuclear part of Article VI aspires. And given that, it must thereafter make sense that replacement weapons should be designed with the benefit of technical advances available, to be more robust, safer, if possible more accurate, and perhaps of lower explosive yield, or at least with a greater proportion of weapons having lower explosive yield, than in the major part of current armouries. (This last point goes with a personal hobby-horse of mine: that we should all move,

and be seen to move, still further away from crude notions of counter-city or counter-population threat as needed for deterrence.)

I am, however, a good deal more sceptical of new weapons for new purposes or expanded doctrines. I am prepared to believe, though I am not competent to form an independent technical judgment, that one can conceive of targets that could not with absolute certainty be taken out by weapons of the various types in current armouries. But I would take a lot of convincing that the net contribution of new weapons specially designed for such purposes, as compared with what existing nuclear (or indeed, increasingly, non-nuclear) weapons could do, is so important to deterrence as to warrant the costs and, still more, the political disadvantages of appearing to widen the functions and importance of nuclear weapons at a time when general world opinion is looking to the nuclear possessors rather to reduce the scale, diversity, and salience of their armouries. And general world opinion matters, as I have indicated, for the perceived legitimacy of the non-proliferation regime.

I come now to numbers and deployment, still against the backdrop of that Article VI expectation and pressure. It will, I assume, be generally accepted that the nuclear possessors must continue to do all that they can to reduce their armouries to the minimum that legitimate security truly requires in the post-Cold-War world of today and tomorrow. The three Western possessors have all done a considerable amount in this direction – more than is always recognised, and I suspect that there is need for more constant and vigorous public presentation – to scale down the number of their weapons and the types of delivery systems, as well as taking further the process (which has a long history in the Alliance, as critics again often forget) of exploiting technological advances to provide the ability to achieve by non-nuclear means military effects once thought to require the explosive power of nuclear weapons. That said, I believe that there is probably scope to do more yet, for example going beyond the levels of reduction implicit in the Moscow Treaty and making them more durable. I do not rule out that even the UK, with its relatively small force, could move further, and I hope that the UK Government will look at the possibilities when it comes, in the next year or so, to decide what to do about the continuance of its capability beyond the present generation.

And then there is the matter of what to do about NATO-declared US nuclear weapons deployed in Europe. I am not sure whether my view would be regarded as heresy, but I offer it briefly. I do not at all believe that we need apologise for these weapons or be defensive about them, but I doubt whether their permanent presence remains essential nowadays either in military and deterrent terms or as a symbol of continuing US commitment to the security of its European allies. If a stage is reached – as I conjecture that it may be at some point in the next few years – where fresh decisions or considerable new investments are involved in maintaining these weapons and providing delivery vehicles for them, the arguments for continuance would not seem to me by any means compelling, subject to a crucial political proviso. That proviso is that discontinuance must not be presented, on either side of the Atlantic, as a US weakening of commitment, or as a European dissociation from the nuclear aspects of the Alliance strategic concept, or as acceptance of any sort of formal nuclear-weapon-free zone within the Alliance.

Discontinuance would have advantages, I take it, in the reduction of various sorts of cost and in being presentable as a move in the spirit of Article VI. It would also – though I do not put this forward as a primary argument – have the effect of depriving Russia of a pretext she has sometimes sought to exploit both for opposing NATO's wider development and for evading the question of whether and why Russia herself need continue to maintain a non-strategic nuclear armoury that is now far larger than that of anyone else. The size and secrecy of that armoury is surely the biggest single weakness in the account the approved NPT Five can collectively give of their disarmament efforts.

I do not plan to go into the arms-control-agenda aspect of the legitimacy issue. I should like however briefly to register my disquiet at the apparent assumption that the Thirteen Steps promised at the 2000 Review Conference can simply be put aside, for example in relation to the Comprehensive Test Ban Treaty (CTBT) and a verifiable fissile material cut-off treaty. (I have never been a passionate admirer of the CTBT in cold technical and security terms, but it has to be recognised that over decades now it has acquired a global political weight that cannot be ignored.)

I have been talking mostly about what NATO countries should do, or avoid doing, in order to reinforce the international legitimacy and acceptance of the non-proliferation regime. But there is also the question of what they should do to help strengthen its practical working. Experts are familiar with the various agreements and systems comprised in the regime's operation – institutions like the Nuclear Suppliers Group; instruments like the International Atomic Energy Agency's Additional Protocol; activities like the Proliferation Security Initiative, Cooperative Threat Reduction and the Global Partnership launched at Kananaskis in 2002; and commitments like those imposed by UN Security Council Resolution 1540 to put in place solid national arrangements to prevent materiel and know-how getting into the wrong hands. I hope that it can be taken for granted that all members of the Alliance support every such component of the regime and are keen to do their best to make them effective. The question that occurs to me – admittedly from a position of ignorance – is how far NATO itself, as an organisation, might play a stronger part in the collective monitoring of what member states do, and in facilitating the exchange of information, ideas, and experience. The central staffs of the European Union undertake efforts of this kind with EU states, and it may be that there is worthwhile scope for further cooperation and coordination between the two organisations. Certainly bureaucratic or political-doctrine barriers should not be allowed to impede that.

Let me, finally, suggest a couple of points about the special matter of Iran. The whole international community faces two basic problems: first, what can de done to deter Iranian acquisition of a nuclear armoury; second, what should be done if, in the end and despite all preventive efforts, Iran does acquire one. I cannot attempt any general analysis, but I offer one thought on each of these problems, in reverse order. On the second, I admit to being deeply sceptical of whether some huge and expensive effort in ballistic missile defence will make either a necessary or a cost-effective contribution. On the first, it seems to me essential that if the particular NATO countries which have been in the forefront of the negotiation with Iran do conclude that nothing less than the credible and imminent prospect of severe economic sanctions will influence the Iranian leadership, they should be given the prompt and unqualified support of every other member of the Alliance. The biggest

single danger now confronting the non-proliferation regime is surely the possibility that Iran might succeed in breaking out from it without suffering very painful consequences (and without modifying its wholly intolerable stance on the existence of Israel). The fullest and most cohesive weight of the Alliance should be mobilised to contribute to preventing that.

NUCLEAR PROLIFERATION AND NATO POLICY AND POSTURE

Roberto ZADRA[1]

Introduction

Because other workshop participants focused on the question whether there is a future for the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), this paper focuses on the impact of that debate on NATO policy and posture. The impact of the NPT on such policy and posture can be assessed from two perspectives: from the perspective of the non-proliferation efforts of the Alliance as a whole, at 26, and from the perspective of its nuclear policy and posture within the Nuclear Planning Group, at 25 (France is not a member of the NPG).

Impact of the NPT on NATO non-proliferation efforts (NATO at 26)

Since the May 2005 NPT Review Conference, many articles have been published in academic journals and books pointing out that the NPT, and the non-proliferation regime for which it is the centrepiece, are increasingly in trouble and may no longer occupy centre stage as has been the case for the last 35 years. Does the Alliance share this pessimistic view? How is the NPT discussed among Allies, and what are the practical outcomes from such discussions?

[1] Deputy Head, Weapons of Mass Destruction Centre, NATO Headquarters, Brussels. The views expressed in this paper are the author's own, and do not necessarily reflect official NATO or national policy.

The May 2005 Review Conference was discussed mainly in NATO's Senior Politico-Military Group on Proliferation (SGP), a senior-level Group that consists predominantly of foreign ministry representatives from Allied capitals. These discussions had limited ambitions, in the sense that they aimed neither at a pre-coordination of positions in advance of the Review Conference nor at a common interpretation of its outcomes after the event. Allies nevertheless consider these exchanges useful as they contribute to a more vigorous and structured debate, leading to a better common understanding of the nature of current challenges to the NPT regime.

NPT-related discussions with NATO Partners in the Euro-Atlantic Partnership Council (EAPC) and the Mediterranean Dialogue, as well as separately with Ukraine and Russia, have been somewhat similar – both in terms of limited ambitions and in terms of the quality of the debate.

It is difficult to quantify the practical outcomes of these discussions, mainly because the Allies have agreed to limit themselves to the monitoring of developments, to informal information exchanges, and to non-binding consultations. In other words, one could conclude that the impact of NPT Review Conferences on NATO's non-proliferation efforts is somewhat limited – not because Review Conferences are not considered important by the Allies, but because NATO's role in terms of non-proliferation efforts, i.e. political and diplomatic efforts, remains relatively small. Declarations from NATO Summits and Communiqués from Foreign and Defence Ministers' meetings usually emphasize the Alliance's support for the NPT and its goals, but there is little measureable follow-up in terms of concrete action. These Communiqués are nevertheless important as they demonstrate the Alliance's overall commitment to the principles and objectives of the NPT. It is also worth mentioning that, in addition to Declarations and Communiqués, the Alliance occasionally releases Statements urging countries in the process of undermining the non-proliferation regime to reverse their decisions or actions. For example, on 28 May 1998 NATO and Russia jointly condemned the nuclear tests conducted by India and Pakistan; on 5 July 2006 the North Atlantic Council (NAC) condemned North Korea's most recent launch of ballistic missiles; and, on 10 October 2006, the Alliance

condemned 'in the strongest terms possible' the North Korean nuclear weapon test and called upon Pyongyang to completely and verifiably eliminate its nuclear weapons and related programmes.

Does the Alliance share the pessimistic views expressed by some scholars regarding future prospects for the NPT? Comparing academic assessments with official NATO positions shows an apparent discrepancy of views, because Alliance Communiqué language does not provide any hint that the NPT regime may be in difficulty. For example, in the June 2004 Istanbul Summit Communiqué – admittedly drafted *before* the May 2005 NPT Review Conference – NATO Heads of State and Government underlined their "commitment to reinforcing the Nuclear Non-Proliferation Treaty, the cornerstone of non-proliferation and disarmament".[2] NATO Foreign and Defence Ministers' Communiqués at 26 have not commented on the NPT since the May 2005 Review Conference, but the June 2006 Nuclear Planning Group (NPG) Communiqué, at 25, describes the NPT as "the cornerstone of global nuclear non-proliferation efforts and an essential basis for the pursuit of nuclear disarmament".[3] Allied governments are of course aware of the problems and challenges facing the NPT, but they have not drawn the collective conclusion that this would be a sufficient reason for NATO to stop supporting it. At this stage the Treaty may be in difficulty but no viable alternative is in sight, and therefore it continues to make sense to support it.

Apart from its political support for the NPT regime, can or should NATO do more collectively to contribute to reducing the dangers of nuclear proliferation? For example, is it possible to envisage NATO contributions to multinational interdiction efforts under the Proliferation Security Initiative, to the implementation of the G-8 Global Partnership, or to other initiatives such as the 2006 United States-Russian announcement of a global initiative to combat nuclear terrorism? While at first glance some of these activities may appear worth exploring further, any NATO involvement in such tasks would require a common decision

[2] Istanbul Summit Communiqué, 28 June 2004, par. 14.

[3] Final Communiqué, Ministerial meeting of the Defence Planning Committee and the Nuclear Planning Group, 8 June 2006, par. 7. Similar wording in support of the NPT was used in the 29 November 2006 Riga Summit Declaration.

by Allies to support them collectively. This also raises broader questions: To what extent should a collective security and defence organisation such as NATO further expand its missions into other geographical regions? What would be optimal divisions of labour between nations, the Alliance and other international organisations and actors in this field? Past experience shows that such debates quickly become theological, particularly if other actors, such as the European Union and the United Nations, are brought into the equation. For the time being one can only conclude that much will depend on the preparedness of Allies to accept further expansion of NATO's roles and missions in the years to come.

Impact of the NPT on NATO nuclear policy and posture (NATO's NPG at 25)

How is the NPT discussed in NATO's Nuclear Planning Group (without France), and do these discussions have any impact on the evolution of Alliance nuclear policy and posture?

Discussions in the NPG community at 25 are generally similar to the ones held in NATO's non-proliferation community at 26: NPG Allies monitor overall nuclear non-proliferation developments, exchange information and views about upcoming NPT Review Conferences, and assess the outcomes of such conferences. However, discussions in the NPG community are mostly focussed on the NPT-related issues that are considered relevant for NATO's nuclear policy and posture - in particular on the commitments under NPT Articles I and II, including the non-transfer of nuclear weapons to non-nuclear-weapon states, and Article VI, including measures related to nuclear disarmament.

When the NPG and its individual members speak in public about the NPT and NATO's policy and posture, they usually reaffirm their commitment to the Treaty and to the goal of universal adherence to it. Allies also point out that NATO's nuclear posture fully conforms with Articles I and II of the Treaty, as shared deterrence in NATO's case means that the nuclear powers maintain full custody of their nuclear weapons. Allies are also quite sensitive to arguments raised by critics and often underline their commitments to nuclear disarmament under Article VI of the NPT, highlighting the reduced reliance on, and dramatic

reductions of, nuclear forces in NATO nations since the end of the Cold War.

That said, NATO's nuclear policy and posture cannot be driven exclusively by considerations about the NPT and its Review Conferences but must also be assessed and managed on the basis of other political and strategic considerations. For example, any defence posture must be perceived as credible by those who maintain it and by potential opponents or adversaries that it is designed to deter; it must be based on and driven by a sound and continually updated threat analysis; and it should be cost effective. These considerations go beyond the issue of NPT obligations, and they will continue to require attention and careful analysis by both nuclear and non-nuclear weapons states in the Alliance.

Considerations…

Today's security environment is substantially different from that in March 1970, when the Treaty on the Non-Proliferation of Nuclear Weapons entered into force. India and Pakistan entered the nuclear club without joining the NPT. Israel is said to have an 'undoubted but unacknowledged nuclear capability'[4]. North Korea abandoned the NPT and Iran has publicly threatened to do so and is suspected to be aiming at a nuclear-weapon capability. Both nuclear and non-nuclear NPT signatories learned hard lessons from the discovery of the A. Q. Khan network and Libya's revelations as to its clandestine activities before December 2003. Should we assume that this is it, or is there a possibility that there will be more damaging and treaty-erosive cases in the future? It is hard to believe that we have reached the end of the trend. Other states in the European neighbourhood and in more distant areas will seek nuclear energy and technology and, therefore, may be tempted one day to develop nuclear weapons.

What observations and conclusions should NPT-compliant non-nuclear- weapon states in NATO draw from this?

[4] Michael Quinlan, «Au-delà de l'arme nucléaire?», *Politique Étrangère*, vol. 66 (January-March 2001), p. 188.

First, this question raises another fundamental question: are the Allies prepared to move the Alliance into new confrontational relationships with proven or suspected NPT non-compliant states, or do they still believe that there is sufficient time to develop a relationship with those countries mainly characterised by cooperation and dialogue? If one follows the logic of those who put their emphasis on *strength*, then a solid defence policy and posture, including missile defence and nuclear deterrence, and other political and economic disincentives, including economic sanctions, would make perfect sense. On the other hand, if one follows the logic of those who believe that *cooperation* and '*peaceful coexistence'* are achievable even with NPT non-compliant states, then improving political and economic relations would play a more prominent role than defence. One could argue that strength and cooperation are not necessarily mutually exclusive and recall the Harmel Report or West Germany's Ostpolitik as examples from recent history. However, while this is true to some extent, these examples from the Cold War also demonstrate how difficult it has been, and will continue to be, to reconcile both approaches.

Second, the transatlantic security consensus has been eroding over the past decade. In recent years we have witnessed differences in threat perceptions (Iraq) and disagreements on response options, as well as on arms control and disarmament issues. Few observers would argue today that nothing has changed and that everything is as 'fine' as it was in the 'good old days' of the Cold War, when the Allies had a shared perception of the Soviet threat and well-defined strategies and doctrines of defence. While it is true that the *intra-European* security consensus has also been weak in recent years, on Iraq for example, this does not change the fact that *transatlantic* relations *have* suffered.

Third, what is the role of nuclear policy and posture in this changed environment? NATO's current nuclear policy and posture have been further modified and adapted in recent decades. However, it is still essentially a result of previous threat analyses stemming from the days of the Cold War. The threat of large-scale aggression by the Soviet Union against Western Europe is now history, but it was in those days that decisions were taken to deploy US nuclear bombs and dual capable aircraft (DCA) in Allied countries. One can, of course, argue that the

current nuclear posture remains an insurance policy against the unknown, and that its importance is further underscored by the "dangers inherent in the growing risk of nuclear proliferation"[5]. However, the devil remains in the details. Insurance companies are happy to sell customers all kinds of contracts, but they always define the circumstances in which their coverage would be valid and those in which it would not. In other words, the 'insurance against the unknown' argument may have its merits, but it could also have a downside if we hide behind it and avoid a collective reflection on what it means in concrete terms.

Fourth, it is important to analyse the meaning of flexibility and credibility. NPG Communiqués often underscore "the importance of NATO maintaining a credible and flexible deterrent posture"[6]. But flexible to do what? Although capabilities should be flexible enough to deal with any contingency, there is no doubt that in certain scenarios DCA-based options would be less relevant. For example, comparing the average speed of DCA (subsonic, usually less than 1,100 km/hour) with the average Mach 17 or 6km/second speed of some of the missiles currently deployed or tested in proven or suspected NPT non-compliant states is a frustrating experience. This is not like comparing the speed of a small city car with the speed of a Ferrari; it is not even close. Furthermore, speed is not the only criterion for an assessment of the flexibility of the current posture. If one considers other factors such as the potential exposure and vulnerability of airbases to missile strikes and the operational complexities involved in loading a nuclear B61 bomb on an aircraft in a hangar, it is hard to avoid the conclusion that more operational flexibility could be useful if credibility in the new security environment is the goal. To avoid misunderstandings, the current DCA posture still has some advantages, in the sense that it continues to demonstrate Alliance solidarity and common commitment through carefully designed burden sharing and C3 arrangements among nuclear and non-nuclear Allies. Moreover, the total Alliance nuclear posture includes forces in addition to the DCA and associated gravity bombs — for example, British Trident missiles and US strategic nuclear capabilities. However, the balance between the fundamental *political*

[5] Final Communiqué, Ministerial meeting of the Defence Planning Committee and the Nuclear Planning Group, 8 June 2006, par. 6.
[6] Ibid.

purpose of Allied nuclear forces and the operational effectiveness from a military point of view continues to be delicate and must be constantly reassessed.

... and Conclusions

The NPT is clearly facing difficulties. NATO's collective non-proliferation efforts are important but have been modest, and its current nuclear policy and posture need rethinking. The current situation is not future-proof.

Both nuclear-weapon states (NWS) and non-nuclear-weapon states (NNWS) in NATO would draw benefits from a more profound reconsideration of the current security environment and its likely trends in the years to come. The nuclear-weapon states are already engaged in such reconsideration. For example, the current nuclear modernization debate in the United Kingdom is considering a timeframe of 2020 and beyond for the modernization of nuclear submarines, Trident D5 missiles, and nuclear warheads. NWS are not shying away from discussing possible future scenarios, hence *non-nuclear-weapon states in NATO should not shy away from it either.*

It is hard to imagine that NATO's current nuclear policy and posture will remain unchanged in the decades to come. From the perspective of a non-nuclear-weapon state in Europe, two facts, in particular, appear increasingly *unsatisfactory in the long run*:

- the fact that the NPG focuses mainly on the narrow issue of nuclear forces based in Europe and committed to NATO; and
- the fact that France does not participate in the NPG.

Therefore, taking the NPT and the current security environment into account and looking ahead, from the perspective of a European NNWS it would appear reasonable to suggest that a comprehensive debate on the future of extended nuclear deterrence be promoted. This debate should take into account US nuclear forces based in Europe, the independent nuclear forces of the United Kingdom and France and the strategic nuclear forces of the United States, and it should consider additional or alternative modalities for nuclear-sharing arrangements in

the 21st century. This debate should ideally take place in NATO, but if it cannot be done there, then alternatives would have to be found, be they multilateral or bilateral. At this point in time, the format and venue of such discussions is of secondary importance: what matters more is that nuclear- and non-nuclear- weapon states engage in a debate on substance.

Appendix I
Treaty on the Non-Proliferation of Nuclear Weapons

Signed at Washington, London, and Moscow 1 July 1968
Entered into force 5 March 1970

The States concluding this Treaty, hereinafter referred to as the "Parties to the Treaty",

Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples,

Believing that the proliferation of nuclear weapons would seriously enhance the danger of nuclear war,

In conformity with resolutions of the United Nations General Assembly calling for the conclusion of an agreement on the prevention of wider dissemination of nuclear weapons,

Undertaking to cooperate in facilitating the application of International Atomic Energy Agency safeguards on peaceful nuclear activities,

Expressing their support for research, development and other efforts to further the application, within the framework of the International Atomic Energy Agency safeguards system, of the principle of safeguarding effectively the flow of source and special fissionable materials by use of instruments and other techniques at certain strategic points,

Affirming the principle that the benefits of peaceful applications of nuclear technology, including any technological by-products which may be derived by nuclear-weapon States from the development of nuclear explosive devices, should be available for peaceful purposes to all Parties of the Treaty, whether nuclear-weapon or non-nuclear weapon States,

Convinced that, in furtherance of this principle, all Parties to the Treaty are entitled to participate in the fullest possible exchange of scientific information for, and to contribute alone or in cooperation with other States to, the further development of the applications of atomic energy for peaceful purposes,

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament,

Urging the cooperation of all States in the attainment of this objective,

Recalling the determination expressed by the Parties to the 1963 Treaty banning nuclear weapon tests in the atmosphere, in outer space and under water in its Preamble to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to this end,

Desiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery pursuant to a Treaty on general and complete disarmament under strict and effective international control,
Recalling that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the Purposes of the United Nations, and that the establishment and maintenance of international peace and security are to be promoted with the least diversion for armaments of the worlds human and economic resources,

Have agreed as follows:

Article I
Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

Article II
Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

Article III
1. Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agencys safeguards system, for the exclusive purpose of verification of the fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Procedures for the safeguards required by this article shall be followed with respect to source or special fissionable material whether it is being produced,

processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this article shall be applied to all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere.
2. Each State Party to the Treaty undertakes not to provide: (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this article.
3. The safeguards required by this article shall be implemented in a manner designed to comply with article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international cooperation in the field of peaceful nuclear activities, including the international exchange of nuclear material and equipment for the processing, use or production of nuclear material for peaceful purposes in accordance with the provisions of this article and the principle of safeguarding set forth in the Preamble of the Treaty.
4. Non-nuclear-weapon States Party to the Treaty shall conclude agreements with the International Atomic Energy Agency to meet the requirements of this article either individually or together with other States in accordance with the Statute of the International Atomic Energy Agency. Negotiation of such agreements shall commence within 180 days from the original entry into force of this Treaty. For States depositing their instruments of ratification or accession after the 180-day period, negotiation of such agreements shall commence not later than the date of such deposit. Such agreements shall enter into force not later than eighteen months after the date of initiation of negotiations.

Article IV
1. Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II of this Treaty.
2. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also cooperate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world.

Article V
Each party to the Treaty undertakes to take appropriate measures to ensure that, in accordance with this Treaty, under appropriate international observation and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear-weapon States Party to the Treaty on a nondiscriminatory basis and that the charge to such Parties for the explosive devices used will be as low as possible and exclude any charge for research and development. Non-nuclear-weapon States Party to the Treaty shall be able to obtain such benefits, pursuant to a special international agreement or agreements, through an appropriate international body with adequate representation of non-nuclear-weapon States. Negotiations on this subject shall commence as soon as possible after the Treaty enters into force. Non-nuclear-weapon States Party to the Treaty so desiring may also obtain such benefits pursuant to bilateral agreements.

Article VI
Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control.

Article VII
Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

Article VIII
1. Any Party to the Treaty may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depositary Governments which shall circulate it to all Parties to the Treaty. Thereupon, if requested to do so by one-third or more of the Parties to the Treaty, the Depositary Governments shall convene a conference, to which they shall invite all the Parties to the Treaty, to consider such an amendment.
2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties, including the instruments of ratification of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of

the Board of Governors of the International Atomic Energy Agency. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment.
3. Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized. At intervals of five years thereafter, a majority of the Parties to the Treaty may obtain, by submitting a proposal to this effect to the Depositary Governments, the convening of further conferences with the same objective of reviewing the operation of the Treaty.

Article IX
1. This Treaty shall be open to all States for signature. Any State which does not sign the Treaty before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.
2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland and the Union of Soviet Socialist Republics, which are hereby designated the Depositary Governments.
3. This Treaty shall enter into force after its ratification by the States, the Governments of which are designated Depositaries of the Treaty, and forty other States signatory to this Treaty and the deposit of their instruments of ratification. For the purposes of this Treaty, a nuclear-weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967.
4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.
5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession, the date of the entry into force of this Treaty, and the date of receipt of any requests for convening a conference or other notices.
6. This Treaty shall be registered by the Depositary Governments pursuant to article 102 of the Charter of the United Nations.

Article X
1. Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty

and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.
2. Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.

Article XI
This Treaty, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the undersigned, duly authorized, have signed this Treaty.

DONE in triplicate, at the cities of Washington, London and Moscow, this first day of July one thousand nine hundred sixty-eight.

Appendix II
Key NATO Statements on the Proliferation Threat and Non-Proliferation Policy

"The proliferation of weapons of mass destruction and the spread of destabilising military technology have implications for Allies' security and illustrate that in an ever more interdependent world, we face new security risks and challenges of a global nature."

North Atlantic Council, communiqué, 17-18 December 1990, paragraph 15.

***

"Proliferation of weapons of mass destruction and their delivery means constitutes a threat to international security and is a matter of concern to NATO. We have decided to intensify and expand NATO's political and defence efforts against proliferation. . . . In this regard, we direct that work begin immediately in appropriate fora of the Alliance to develop an overall policy framework to consider how to reinforce ongoing prevention efforts and how to reduce the proliferation threat and protect against it."

Declaration of the Heads of State and Government participating in the Meeting of the North Atlantic Council held at NATO Headquarters, Brussels, 10-11 January 1994, paragraph 17.

***

"The principal non-proliferation goal of the Alliance and its members is to prevent proliferation from occurring or, should it occur, to reverse it through diplomatic means. In this regard, NATO seeks to support, without duplicating, work already underway in other international fora and institutions. Accordingly, and in keeping with NATO's role as a transatlantic forum for consultation, Allies will:

- assess the potential proliferation risk presented by States on NATO's periphery, as well as relevant developments in areas beyond NATO's periphery;
- consult regularly on WMD proliferation threats and related issues and coordinate current Alliance activities that involve aspects of WMD proliferation issues;

- examine whether there are ways to contribute, through diplomatic or technical measures, to the implementation and strengthening of international arms control, disarmament and non-proliferation norms and agreements. In particular, Allies will:
- support efforts to broaden participation in international non-proliferation fora and activities;
- continue to share information on their various efforts to support the safe and secure dismantlement of nuclear weapons in the former Soviet Union;
- consider relevant initiatives that Allies might undertake to support non-proliferation objectives;
- consult within the NACC framework with NACC and PfP Partners with the aim of fostering a common understanding of, and approach to the WMD proliferation problem, taking into account efforts in this field in other fora, in particular the different export control groups.

Recent events in Iraq and North Korea have demonstrated that WMD proliferation can occur despite international non-proliferation norms and agreements. As a defensive Alliance, NATO must therefore address the military capabilities needed to discourage WMD proliferation and use, and if necessary, to protect NATO territory, populations and forces.

NATO will therefore:

- examine in detail the current and potential threat to Allies posed by WMD proliferation, taking into consideration major military/technological developments;
- examine the implications of proliferation for defence planning and defence capabilities of NATO and its members, and consider what new measures may be required in the defence area;
- seek, if necessary, to improve defence capabilities of NATO and its members to protect NATO territory, populations and forces against WMD use, based on assessments of threats (including non-State actors), Allied military doctrine and planning, and Allied military capabilities;
- consider how its defence posture can support or might otherwise influence diplomatic efforts to prevent proliferation before it becomes a threat or to reverse it".

North Atlantic Council, Alliance Policy Framework on Proliferation of Weapons of Mass Destruction, 9-10 June 1994, paragraphs 11-13.

***

“Particular attention was given to enhancements to the Alliance’s ability to move its forces within and between theatres and to sustain them once they are deployed. Such capabilities are essential both for the Alliance’s collective defence and for new missions which require the capability for flexible deployments for defence, peacekeeping and crisis management and the capability to counter the risks of the proliferation of weapons of mass destruction and their means of delivery.”

Final communiqué of the Defense Planning Committee and the Nuclear Planning Group, 13 June 1996, paragraph 6.

***

“The proliferation of NBC weapons and their means of delivery remains a matter of serious concern. In spite of welcome progress in strengthening international non-proliferation regimes, major challenges with respect to proliferation remain. The Alliance recognises that proliferation can occur despite efforts to prevent it and can pose a direct military threat to the Allies' populations, territory, and forces. Some states, including on NATO's periphery and in other regions, sell or acquire or try to acquire NBC weapons and delivery means. Commodities and technology that could be used to build these weapons of mass destruction and their delivery means are becoming more common, while detection and prevention of illicit trade in these materials and know-how continues to be difficult. Non-state actors have shown the potential to create and use some of these weapons.”
“The Alliance's forces have essential roles in fostering cooperation and understanding with NATO's Partners and other states, particularly in helping Partners to prepare for potential participation in NATO-led PfP operations. Thus they contribute to the preservation of peace, to the safeguarding of common security interests of Alliance members, and to the maintenance of the security and stability of the Euro-Atlantic area. By deterring the use of NBC weapons, they contribute to Alliance efforts aimed at preventing the proliferation of these weapons and their delivery means.”

North Atlantic Council, Strategic Concept, 24 April 1999, paragraphs 22 and 41.

***

"The proliferation of nuclear, biological and chemical (NBC) weapons and their means of delivery can pose a direct military threat to Allies' populations, territory, and forces and therefore continues to be a matter of serious concern for the Alliance. The principal non-proliferation goal of the Alliance and its members is to prevent proliferation from occurring, or, should it occur, to reverse it through diplomatic means."
"The WMD Initiative will: ensure a more vigorous, structured debate at NATO leading to strengthened common understanding among Allies on WMD issues and how to respond to them; improve the quality and quantity of intelligence and information-sharing among Allies on proliferation issues; support the development of a public information strategy by Allies to increase awareness of proliferation issues and Allies' efforts to support non-proliferation efforts; enhance existing Allied programmes which increase military readiness to operate in a WMD environment and to counter WMD threats; strengthen the process of information exchange about Allies' national programmes of bilateral WMD destruction and assistance; enhance the possibilities for Allies to assist one another in the protection of their civil populations against WMD risks; and create a WMD Centre within the International Staff at NATO to support these efforts. The WMD initiative will integrate political and military aspects of Alliance work in responding to proliferation."

Washington Summit Communiqué, 24 April 1999, paragraphs 30 and 31.

***

"Recalling the tragic events of 11 September 2001 and our subsequent decision to invoke Article 5 of the Washington Treaty, we have approved a comprehensive package of measures, based on NATO's Strategic Concept, to strengthen our ability to meet the challenges to the security of our forces, populations and territory, from wherever they may come. Today's decisions will provide for balanced and effective capabilities within the Alliance so that NATO can better carry out the full range of its missions and respond collectively to those challenges, including the threat posed by terrorism and by the proliferation of weapons of mass destruction and their means of delivery."

Prague Summit Declaration Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Prague on 21 November 2002, par. 3.

***

"Today, we underline our commitment to reinforcing the Nuclear Non-Proliferation Treaty, the cornerstone of non-proliferation and disarmament, and ensuring the full compliance with it by all states Party to the Treaty; . . .strongly support United Nations Security Council Resolution 1540, calling on all states to establish effective national export controls, to adopt and enforce laws to criminalise proliferation, to take cooperative action to prevent non-state actors from acquiring WMD, and to end illicit trafficking in WMD and related materials; . . . and welcome the discovery and ongoing investigation of the A. Q. Khan proliferation network."

Istanbul Summit Communiqué, 28 June 2004, paragraph 14.

***

"The dangers inherent in the growing risk of nuclear proliferation underscore the importance of NATO maintaining a credible and flexible deterrent posture. . . . We reaffirmed our full commitment to the Nuclear Non-Proliferation Treaty as the cornerstone of global nuclear non-proliferation efforts and an essential basis for the pursuit of nuclear disarmament. In this context, we expressed serious concern over the possible consequences for security and stability, resulting from instances of non-compliance with the Treaty."

Final communiqué, ministerial meeting of the Defence Planning Committee and the Nuclear Planning Group, Brussels, 8 June 2006, paragraphs 6 and 7.

***

"We fully support the United Nations Security Council's determination that the Democratic People's Republic of Korea's nuclear test constitutes a clear threat to international peace and security and the Council's demand that the Iranian government suspend all enrichment-related and reprocessing activities including research and development to be verified by the International Atomic Energy Agency. We expect that both governments comply fully with the demands of relevant United Nations Security Council resolutions. We express our support to ongoing diplomatic efforts in this respect. We reiterate that the Nuclear Non-Proliferation Treaty remains the cornerstone of non-proliferation and disarmament, and call for the full compliance with it by all States Parties to the Treaty. We reaffirm that arms control and non-proliferation will continue to play a major role in preventing the spread and use of Weapons of Mass Destruction and their means of delivery. Current proliferation challenges underline the importance of strengthening national measures, implementation of United Nations Security Council Resolution 1540, and existing multilateral non-

proliferation and export control regimes and international arms control and disarmament accords, including the Biological and Toxin Weapons Convention, the Chemical Weapons Convention and the Hague Code of Conduct against the Proliferation of Ballistic Missiles."

Riga Summit Declaration Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Riga on 29 November 2006, paragraph 44.

2006-2007 ISSUES / PARUS EN 2006-2007

www.ndc.nato.int

Forum Papers Series

No 2 – March 2007
Improving NATO-NGO Relations in Crisis Response Operations, Laure Borgomano-Loup

No 1 – May 2006
Renewing NATO's Partnerships: Towards a Coherent and Efficient Framework, Carlo Masala and Katariina Saariluoma

Occasional Papers Series

No. 20 – January 2007
Divergences entre Israël et les pays européens de l'OTAN sur la sécurité durable de l'Etat d'Israël, Ilan Greilsammer

No 19 – December 2006
Sécurité et stabilité dans le Sahel Africain, Mehdi Taje

No 18 – November 2006
Russia's Quest for Strategic Identity, Stanislav Secrieru

No. 17 – October 2006
Defense Reform and the Russian Navy, Yuri Krupnov

No. 16 – June 2006
A Roadmap for Ukraine's Integration into Transatlantic Structures, Oksana Kozlovska

No. 15 – May 2006
NATO-EU Cooperation in Post-Conflict Reconstruction

No. 14 – April 2006
Le Maghreb stratégique (2ème partie)

No 13 – March 2006
Integrative Processes in the South Caucasus and their Security Implications, Leila Alieva

No. 12 – February 2006
Promoting Sustainable Security - Promouvoir la sécurité durable

Authors

Martin BRIENS
Pierre GOLDSCHMIDT
John R. HARVEY
Rüdiger LUDEKING
Joseph F. PILAT
Michael QUINLAN
Michael RUHLE
Thomas K. SCHEBER
Bruno TERTRAIS
William WALKER
Paul WILKE
David S. YOST
Roberto ZADRA