

Nuclear Threat Perceptions and Nonproliferation Responses: A Comparative Analysis

SCOTT PARRISH AND WILLIAM C. POTTER

WMDC

THE WEAPONS OF
MASS DESTRUCTION
COMMISSION

www.wmdcommission.org

This paper has been commissioned by the Weapons of Mass Destruction Commission. Its purpose is to function as food-for-thought for the work of the Commission. The Commission is not responsible for views expressed in this paper.

Weapons of Mass Destruction Commission (WMDC)

The WMDC is an independent international commission initiated by the Swedish Government on a proposal from the United Nations. Its task is to present proposals aimed at the greatest possible reduction of the dangers of weapons of mass destruction, including both short-term and long-term approaches and both non-proliferation and disarmament aspects. The Commission will issue its report in early 2006.

The commissioners serve in their personal capacity. The Commission is supported by a Secretariat based in Stockholm, Sweden.

Members of the Weapons of Mass Destruction Commission

Hans Blix, Chairman (Sweden)
Dewi Fortuna Anwar (Indonesia)
Alexei G Arbatov (Russian Federation)
Marcos de Azambuja (Brazil)
Alyson Bailes (United Kingdom)
Thérèse Delpech (France)
Jayantha Dhanapala (Sri Lanka)
Gareth Evans (Australia)
Patricia Lewis (Ireland)
Masashi Nishihara (Japan)
William J. Perry (United States of America)
Vasantha Raghavan (India)
Cheikh Sylla (Senegal)
Prince El Hassan bin Talal (Jordan)
Pan, Zhenqiang (China)

Secretary-General of the Commission

Henrik Salander (Sweden)

Weapons of Mass Destruction Commission
Postal address: SE-103 33 Stockholm, Sweden
Visitors' address: Regeringsgatan 30–32
E-mail: secretariat@wmdcommission.org
Website: www.wmdcommission.org

NUCLEAR THREAT PERCEPTIONS AND NONPROLIFERATION RESPONSES: A COMPARATIVE ANALYSIS

by

Scott Parrish and William C. Potter*

I. INTRODUCTION

As one approaches the 2005 NPT Review Conference, it is apparent that NPT States parties have widely divergent views about the health of the Treaty, its relevance to contemporary nuclear challenges, and the feasibility, desirability, and urgency of modifying and/or supplementing what has long been the principal legal foundation for the international nonproliferation regime. It is commonplace and largely correct to ascribe these differences in national perspectives to divergent threat perceptions. Many analysts, for example, have noted that the nuclear weapon states (NWS) and non-nuclear weapon states (NNWS) disagree fundamentally on the priority that should be attached to disarmament and nonproliferation, and associate this disagreement with divergent assessments about the relative threats to international security posed by horizontal or vertical proliferation. By the same token, observers have noted that U.S.-Russian cooperation to counter nuclear terrorism is facilitated by a partial convergence of views in Washington and Moscow about the nuclear threats posed by non-state actors. In other words, it is assumed that threat assessments are linked to policy preferences and that states sharing a common threat perception are more likely to agree on policy priorities.

Although such assumptions are common and reasonable, there are surprisingly few attempts to apply that insight for the purpose of systematically comparing states' nuclear threat perceptions and preferred nonproliferation strategies. Such a comparison might enable one to identify areas where shared threat perceptions increase the likelihood for forging more ambitious (and multilateral) nonproliferation initiatives and also to discern where divergent threat assessments may require alternative nonproliferation strategies involving smaller coalitions of states if they are to be effective. This kind of analysis could be particularly useful in the context of the upcoming 2005 NPT Review Conference, since it might help to identify issues on which consensus might be generated, and those on which collective action is unlikely.

* Additional CNS Staff who contributed to this study include Jean DuPreez, Gaurav Kampani, Maria Lorenzo Sobrado, Daniel Pinkston, Sammy Salama, Lawrence Scheinman, and Jing-Dong Yuan.

This study represents a “first cut” at such an analysis. A group of nonproliferation specialists at the Center for Nonproliferation Studies have collaborated to produce an assessment of the proliferation threat perceptions and nonproliferation strategies of the following sixteen states: Brazil, China, Egypt, Germany, India, Indonesia, Iran, Israel, Japan, Pakistan, the Republic of Korea, the Russian Federation, Spain, South Africa, Sweden, and the United States. These states are not regarded to be a fully representative sample, but are illustrative of countries that traditionally have played a significant role in nuclear politics. The countries include several nuclear weapon states (the United States, Russia, China), a number of non-nuclear weapon states with advanced nuclear power industries (Germany, Japan, South Korea, Spain), members of the New Agenda Coalition (Brazil, Egypt, South Africa, Sweden), the Non-Aligned Movement (Indonesia, Iran), and the three de facto nuclear weapon states (India, Israel, Pakistan). An examination of the threat perceptions and preferred nonproliferation strategies of this diverse and broad range of states should provide useful insights about areas where convergent views may facilitate the crafting of common nonproliferation approaches, and also sensitize one to proliferation challenges for which multilateral action may be difficult if not impossible to achieve.

The assessments below represent the best estimates of CNS analysts about prevailing national perspectives on nuclear threats and preferred nonproliferation strategies in sixteen states. These estimates, about which there undoubtedly will be less than full agreement from other experts, are informed by a careful examination of both official statements and actual behavior by the sixteen states under review and by extended consultations with officials, journalists, and analysts from the countries. Prevailing national perceptions of the intensity of a range of proliferation threats were estimated using a simple “low-moderate-high” scale. Using a similar approach, country preferences for a range of nonproliferation strategies also were estimated along a similar scale. While this index is simple and does not capture the full complexity of many proliferation challenges and nonproliferation strategies, it is nonetheless useful in producing a broad-brush picture of how countries view both proliferation threats and the means of addressing them.

At the same time, it is important to recognize the limits of this approach. In many countries, there is no consensus among policymakers about the nature of proliferation threats and the best means to address them. As with most issues, organizational, political, and economic considerations influence the perspectives of the relevant actors, and can produce national policy that seems neither fully rational, nor even consistent. Nevertheless, it is still possible to identify prevailing national perspectives at any one point in time. This study attempts to identify such prevailing perspectives, and the analysis that follows is based on these estimates. Although this approach may miss many subtleties in national politics and policies, it has the virtue of making explicit and amenable to debate many assumptions that otherwise would not be apparent. It also may prove useful for getting a rough fix on which proliferation threats and nonproliferation strategies have broad support among a range of countries, and which are the subject of greater controversy. The overall picture thus produced may also help in identifying

possible coalitions and strategies for dealing with specific proliferation challenges, which might otherwise be overlooked.

II. PROLIFERATION THREAT PERCEPTIONS

A. Individual Countries

Table One provides a summary of CNS estimate's of prevailing, national nuclear threat perceptions. As might be expected, the summary table reveals that for the countries surveyed there is not complete agreement on which individual states constitute the greatest nuclear proliferation threat. Some interesting patterns, however, emerge.

Individual States

	China	DPRK	India	Iran	Israel	Japan	Pakistan
Brazil	Low	Low	Low	Low	Low	Low	Low
China	N/A	Moderate	Moderate	Moderate	Low	High	Low
Egypt	Low	Low	Low	High	High	Low	Moderate
Germany	Low	High	Low	High	Moderate	Low	Moderate
India	Moderate	Low	N/A	Low	Low	Low	High
Indonesia	Moderate	Moderate	Moderate	Moderate	Low	Low	Moderate
Iran	Low	Low	Low	N/A	High	Low	Low-Moderate
Israel	Moderate	High	Low	High	N/A	Low (N/A?)	High
Japan	Moderate	High	Low	Moderate	Low	N/A	Moderate
Pakistan	Low	Low	High	Low	Low	Low	N/A
ROK	Low-Mod	Moderate-High	Low	Moderate	Low	Low	Moderate
Russia	High	Moderate	Low	Moderate	Moderate	Low-Moderate	High
Spain	Low-Moderate	High	Low-Moderate	High	Moderate-High	Low	Moderate
South Africa	Low	Low	Low	Low	Low	Low	Low
Sweden	Low	High	Low	High	Moderate	Low	Moderate
U.S.	Moderate	High	Moderate	High	Low	Low	Moderate

For almost all states there is a close correspondence between their rankings of the proliferation threats posed by Iran and North Korea. Those that saw North Korea as a low threat also tended to discount the threat posed by Iran, while those that regarded the threat of North Korea to be moderate or high tended to ascribe a similar proliferation threat to Iran. The principal exception to this parallelism is Egypt, which perceived Iran to constitute a high nuclear threat, while attaching a much lower danger to the nuclear challenge posed by North Korea.

Also noteworthy is the fact that all of the *de jure* nuclear weapons states surveyed agree that North Korea and Iran present a moderate or high nuclear threat. On the surface, at least, this convergence of threat perceptions would appear to create the basis for these states undertaking common action to address the proliferation challenges posed by North Korea and Iran. To the extent that France and the United Kingdom also share these perspectives—a reasonable assumption although not one examined in the study—one could imagine the P-5 seeking to address the questions of North Korea and Iran in a joint statement prior to the Review Conference. Such a statement, for example, might seek to limit discussion of the DPRK issue at the Review Conference by identifying the Six-Party Talks as the appropriate vehicle for resolving the North Korean nuclear challenge, an approach likely to be supported strongly by Japan and South Korea.

The comparative threat assessments, however, also point to the divergence of views between the NWS and key representatives of the New Agenda Coalition and NAM (as well as to disagreements within those political groupings) on the issue of country specific threats. For example, Brazil and South Africa are inclined to treat the nuclear threats presented by all of the seven countries examined in our survey as low, while fellow NAC members Sweden and Egypt perceive the threat of Iran to be high (Sweden also regards the nuclear threat of North Korea to be high, while Egypt attaches a much lower value to that threat). Similarly divergent views about the threats posed by Iran and North Korea exist among NAM stalwarts Indonesia, South Africa, Egypt, and Iran. These differences in threat perceptions within NAC and NAM and between these political groupings and the NWS suggest that it will be extremely difficult at the 2005 NPT Review Conference to find consensus language on issues related to North Korea and Iran.

Among the countries surveyed, there are no other individual states that attract such widespread concern as North Korea and Iran. Most other states are regarded as threats only by their regional rivals. Israel, for example, is regarded as a high-level threat by Iran and Egypt, and China is viewed as a moderate or high-level threat by Russia, India, Japan, and the United States. Given the lack of widespread convergence of views regarding these country-specific threats, it is unlikely that broad multilateral action will be undertaken to address these regional security concerns.

B. Nuclear Terrorism

	RDD's	Sabotage of Nuclear Facilities	Improvised Nuclear Device	Tactical Nuclear Weapons
Brazil	Low	Low	Low	Low
China	Low	Low	Low	Low
Egypt	Low	Low	Low	Low
Germany	Moderate	Moderate	Moderate	High
India	Moderate	Low	Low	Low
Indonesia	Moderate	Low	Moderate	Low
Iran	Low	High	Low	High
Israel	Low	Low	Low	Low
Japan	Moderate	Moderate	Moderate	Moderate
Pakistan	Low	Low	Low	Low
ROK	Low-Mod	Moderate	Low	Low
Russia	High	Moderate-High	Low	Low
Spain	Moderate	High	Moderate	Moderate
South Africa	Low	Low	Low	Low
Sweden	Moderate	Moderate	Moderate-High	High
U.S.	High	Moderate	Moderate	Low

Despite the intense media and government focus in the United States on the dangers of nuclear terrorism, much of the rest of the world does not share this sense of urgency. The Russian Federation appears to be the only other state with a comparable level of concern about some dimensions of the nuclear terrorism challenge, and even the United States and Russia tend to be dismissive of one or more forms of nuclear terrorism involving the actual detonation of a nuclear explosive.

Surveying national perspectives on the four principal types of nuclear terrorism—use of radiation dispersal devices, sabotage of or attacks on nuclear facilities, manufacture and use of improvised nuclear devices, and theft and use of an intact nuclear weapon—very few states rate these threats as “high.” On radiation dispersal devices (RDDs) or “dirty bombs” as they are known in the press, for example, only the United States and Russia

regard this threat as high, while seven states rate it as low. In the sample, only Spain and Iran perceive the threat of sabotage of or attack on nuclear facilities as high, and Iran presumably has in mind attacks by the United States or Israel. The possibility of terrorists building an improvised nuclear device is rated as low by ten of the states surveyed, and is not considered “high” by any state, including the United States and Russia. Only five of the states surveyed rate the threat of tactical nuclear weapons as “high” or “moderate,” although a lack of clarity regarding the definition of the term probably accounts for the designation of the “low” ranking for several states in Asia.

In general, the United States, some of its allies, and Russia are most worried about nuclear terrorism. The NAM countries—with the partial exception of Indonesia—are inclined to attach little concern to the threat, and only Sweden among the NAC countries surveyed identifies any of the four facets of nuclear terrorism as a high priority threat. Although a number of NAM countries have voiced support in international fora for steps to counter some aspects of nuclear terrorism, a general recognition of these abstract threats has not translated into an appreciation of how the dangers impact directly on their own national security.

Probably the most counter-intuitive finding from the survey is the low priority given to the threat of “non-strategic” or tactical nuclear weapons by the representatives from NAC in our sample. NAC has been in the forefront in a number of international fora, including the First Committee and the NPT Review Process, in identifying the need to take further practical steps to reduce the threats posed by non-strategic nuclear weapons, but among the four NAC states in our survey, only Sweden appears to view the threat of tactical nuclear weapons as “high.” This apparent disconnect between NAC initiatives and threat perceptions probably is due to the sample of NAC countries in our survey (in particular, the omission of New Zealand and Ireland), the exceptionally high priority attached to the issue by Sweden, and the political tradeoffs among NAC states in the formulation of NAC's initiatives.

Notwithstanding the lack of widespread agreement on any specific form of nuclear terrorism as a high-level threat, the general issue of nuclear terrorism does not generate major political opposition as do a number of country-specific threats. Most states appear to accept the premise that non-states actors constitute an emerging threat to international peace and security even if they do not yet directly threaten their own security. As such, they tend to be willing to defer to those states, including the majority of the NWS, that emphasize the need to take immediate action in multilateral fora, including the UN Security Council, the International Atomic Energy Agency, and the NPT Review Process.

An objective observer might argue that the greatest nuclear terrorist threats pertain to the possible acquisition and use by non-state actors of improvised or intact nuclear weapons. The more widespread dissemination of radioactive sources and nuclear power facilities, however, probably makes it easier to forge broad collective action to counter the dangers of RDDs and nuclear sabotage. The most difficult nuclear threat to tackle is apt to be that of tactical nuclear weapons since the two countries possessing most of the global stocks

of these weapons—Russia and the United States—not only discount their danger but are actively opposed to most initiatives designed to reduce their threat.

C. Nuclear Leakage from the NIS

	Nuclear Material Trafficking	Brain drain	Decommissioned Nuclear Submarines
Brazil	Low	Low	Low
China	Low	Low	Low
Egypt	Moderate	High	Low
Germany	High	Moderate	Moderate
India	Moderate	High	N/A
Indonesia	Low	Low	Low
Iran	Low	Low	Low
Israel	High	High	Low
Japan	Moderate	Moderate	High
Pakistan	Moderate	Low	N/A
ROK	Moderate	Moderate- High	Low-Moderate
Russia	Moderate	Moderate	High
Spain	High	Moderate	Moderate
South Africa	Low	Low	Low
Sweden	High	Moderate	Moderate
U.S.	High	Moderate	Low-Moderate

Interestingly, nuclear leakage from the Newly Independent States (NIS) appears to attract more concern from a broader group of states than nuclear terrorism. Nuclear material trafficking, for example, is cited as a high or moderate concern by 11 countries, with five of those rating it as “high.” Braindrain is viewed as a moderate or high concern by 10 states. Russia itself also recognizes that nuclear leakage is a threat, although it generally tends to downplay its significance in public. It is noteworthy that a number of regional powers, such as Germany, Egypt, Israel, South Korea, and Japan, view the threat of braindrain from the NIS as at least “moderate.” These countries all fear that black-market Russian nuclear expertise will foster proliferation in their neighborhoods. For reasons that are unclear, these states tend to see nuclear material leakage as a similar, but lesser threat.

The countries that share a common threat perception on the issue of nuclear leakage tend to be the allies of the United States. A number of non-aligned countries (e.g., Indonesia and Iran) and some members of the New Agenda Coalition (South Africa and Brazil), do not view this threat as a high priority. While some countries, such as Iran, cynically may hope to benefit from nuclear leakage, most others appear sincere in their belief that this threat is not a top priority. As a result, it may be difficult to generate strong collective action in the context of the NPT on these issues. But a robust coalition of the willing seems achievable, particularly on braindrain, which many countries see as a threat not only in terms of nuclear proliferation, but also in terms of spreading CBW and missile know-how.

Decommissioned Soviet nuclear submarines, on the other hand, are seen as a proliferation concern mainly by Russia and its neighbors. These submarines and their associated nuclear materials do not appear to attract the concern of other countries. Nine of the 15 countries surveyed view this issue as of low priority. It would thus appear to be an unlikely candidate for collective action in the NPT framework, although it has proved to be one of the most popular topics for assistance under the G-8 Global Partnership.

D. Other Threats

	Islamic Fundamentalism	Vertical Proliferation	Failed States	Linkage to BW and CW Threats	Defections from the NPT	Failure to Implement NPT Obligations
Brazil	Low	Moderate	Low	Moderate	Moderate	Moderate
China	High	High	Moderate	Moderate	High	Moderate
Egypt	High	High	High	Low-Moderate	Moderate	High
Germany	High	High	Moderate	Moderate	Moderate	High
India	Moderate	Moderate	Moderate	Moderate	Moderate	High
Indonesia	Moderate	High	Low	Moderate	Moderate	Moderate-High
Iran	Low (except al-Qa`ida)	High	High	High	Moderate	Moderate
Israel	High	High	High	Moderate-High	High	High
Japan	High	High	Moderate	Moderate	High	High
Pakistan	Moderate	High	Low	Low	Low	High
ROK	Low-Moderate	Low-Moderate	Moderate-High	Moderate	Low-Moderate	Low
Russia	High	Moderate	Moderate	Low	Low-Moderate	Low-Moderate
Spain	High	Moderate	Moderate	Moderate	Moderate	Moderate-High
South Africa	Moderate	Moderate	Low	Moderate	Moderate	Moderate
Sweden	High	High	Moderate	Moderate	Moderate	High
U.S.	High	Low	Moderate	Low	Low-Moderate	High

Islamic fundamentalism stands out as a threat recognized as serious by almost all the countries surveyed. Only Brazil and Iran did not consider it to constitute either a moderate or high priority threat (and even Iran was concerned with the threat from Al Qa`ida). Nine states (China, Egypt, Germany, Israel, Japan, Russia, Spain, Sweden, and the United States) were identified as placing the threat at a high level.

However, judging from the analysis of nuclear terrorism threat perceptions presented above, many states do not appear to link Islamic fundamentalism with nuclear terrorism or perhaps even with nuclear proliferation more broadly. Many of the states that view Islamic fundamentalism as a moderate threat, such as Indonesia, South Africa, and India, probably perceive the threat in terms of conventional terrorism and insurgency, rather

than as a nuclear-related issue. As a result, while many states may view Islamic fundamentalism as a significant threat, there appears to be much less agreement on the nature of that threat and its relationship to nuclear terrorism or proliferation.

Vertical proliferation is another threat that is viewed by almost all the states surveyed as of either moderate or high concern. In fact, ten states (China, Egypt, Germany, Indonesia, Iran, Israel, Japan, Pakistan, Spain, and Sweden) rate vertical proliferation as a high priority threat. It is particularly noteworthy that the United States stands alone among the countries surveyed in viewing vertical proliferation as a low threat (South Korea was judged to have a low-moderate level of concern with this issue). Of all the threats surveyed in this analysis, this is the one on which the United States is most isolated. Even many close U.S. allies, such as Germany and Japan, view vertical proliferation as a serious threat. The two other *de jure* nuclear weapon states surveyed, China and Russia, also view it as an issue of high and moderate concern respectively, and therefore are unlikely to side with the United States when this topic is addressed at the Review Conference. In contrast to many of the threats analyzed above, it is also an issue on which the views of the NAC and NAM countries converge, although not perfectly. Given the widespread consensus on the issue, it is an obvious one on which to seek collective action in the framework of the NPT. It is also an issue on which the United States is likely to find itself isolated.

An unusual grouping of states express concern about “failed states”—that is those which lack the capacity to adequately control their national territory and resources, making them sources of instability, terrorism, and possible collapse. On the one hand, the threat is perceived to be moderate to high by the United States and its allies, the other NWS, as well as by Egypt and India. Although many of the non-aligned and New Agenda Coalition countries view this threat as low, several states in both political groupings have contrary perspectives, apparently driven principally by regional security considerations. Given the substantial divergence of views on the generic threat posed by failed states, it is not apparent that collective remedial action will be easy to achieve. The prospect, however, may be more promising with respect to specific states.

There is concern among most of the countries surveyed about defections from the NPT. Only Pakistan (a non NPT-party), rates this threat as “low,” while the two other NPT outliers—India and Israel, view the threat of defections as “moderate” and “high,” respectively. Significantly, however, neither the United States nor Russia currently appear to regard the threat of NPT defections to be of major concern, which in the case of the United States may be a commentary on the diminished nonproliferation value the current administration attaches to the NPT. Most other countries rate the threat as moderate, the exceptions being some states in Northeast Asia (Japan, China) which fear the proliferation consequences of North Korea's announced withdrawal from the NPT, and the Middle East where countries such as Egypt and Israel worry about the proliferation consequences of Iran's possible withdrawal from the treaty.

The considerable degree of shared threat perceptions related to NPT defections may enable NPT states parties to take collective action on this issue at the 2005 NPT Review

Conference. The Conference, for example, might profitably discuss how to interpret and implement Article X of the Treaty, which deals with the withdrawal provisions. While most states are unlikely to support a reinterpretation of the Treaty that restricts their right to withdraw, it may be possible to find near consensus on means to reduce the incentives for states to exploit the NPT (and particularly Article IV on peaceful use of nuclear energy) to achieve a near-nuclear weapon status before declaring their intention to withdraw.

There is widespread concern among the states surveyed about the failure of states parties to implement their NPT obligations, although states vary widely in their assessment of which obligations are not being implemented. For example, those states which are most concerned about the nuclear threats posed by North Korea and Iran also are particularly worried about the failure of those two states to comply with their safeguards obligations. A number of other countries, however, are equally if not more concerned by what they regard to be the failure of the NWS to honor their Article VI disarmament commitments. For these states, concern about NPT compliance tends to correlate highly with threat perceptions about vertical proliferation. Germany, Japan, and Sweden are unusual among the countries in the survey in sharing especially high perceptions of threat related to both the failure of NNWS states to implement their nonproliferation obligations and NWS to honor their disarmament commitments.

III. PREFERRED STRATEGIES FOR ADDRESSING NONPROLIFERATION CHALLENGES

Just as national perspectives on nuclear proliferation threats vary, so do national views on preferred means to counter proliferation challenges. Table Two presents the best estimates of CNS staff regarding the views of the 16 countries surveyed on various nonproliferation strategies. The level of interest or support for various nonproliferation strategies was estimated on a simple low-moderate-high scale.

Arms Control/Disarmament

	NPT	13 Practical Steps	CTBT	NSG	IAEA Safeguards	Additional Protocol	FMCT
Brazil	High	High	Moderate	Moderate	High	Low-Moderate	Moderate
China	High	High	Moderate	Moderate	High	High	Moderate
Egypt	High	High	Moderate	Low	High	Moderate	Moderate
Germany	High	High	High	High	High	High	High
India	Moderate	?	Moderate	Moderate	Moderate	Moderate	Moderate
Indonesia	High	High	Moderate	Low	High	Moderate	High
Iran	High	High	Moderate	Low	High	Moderate	Moderate
Israel	Moderate	Low	Low	Low	Low-Moderate	Low-Moderate	Low
Japan	High	High	High	High	High	High	High
Pakistan	Low	?	High	Low	High	Low	Moderate
ROK	High	Moderate-High	Moderate-High	Moderate-High	High	High	Moderate
Russia	High	Low	Moderate	Low-Moderate	High	Moderate	Moderate
Spain	High	High	High	High	High	High	High
South Africa	Moderate	High	Moderate	Moderate	High	High	High
Sweden	High	High	High	High	High	High	High
U.S.	High	Low	Low	High	High	High	Low

Support for the NPT, especially at the rhetorical level, remains very high among the countries surveyed. Only Pakistan, a non-signatory, attaches a low priority to the NPT. All other countries were judged as viewing the NPT as an important component of their nonproliferation strategy, with 12 of the 15 states identifying it as a high priority.

Although there is broad agreement on the need to strengthen and maintain the NPT, there is much less agreement about what elements of the treaty need strengthening (disarmament or nonproliferation, for example), and little consensus about what concrete steps should be taken to strengthen it. These problems are reflected in the diversity of positions on two treaties that are politically and practically linked to the NPT, the CTBT and the FMCT.

The overwhelming majority of countries surveyed consider the CTBT to be a high or moderate priority. But the strong opposition of the United States to the CTBT means that little progress is likely to be made on its entry into force, even though Israel is the only other country in the survey that shares the U.S. assessment of the treaty as a “low” priority. This finding is not surprising, since the United States has stood virtually alone in its opposition in recent years to UN General Assembly resolutions supporting the CTBT.

The United States and Israel also stand alone as outliers with regard to the FMCT. Both regard it as a “low” priority, but six of the other 15 states regard it as a high priority, and the rest rate it as moderate. Many countries, including close U.S. allies, reject the new position taken by the United States in 2004, which maintains that an FMCT cannot be verified and should be concluded without verification measures. A senior Japanese diplomat interviewed for this survey, for example, commented that his government viewed verification as a very important element of the FMCT. The firm, if isolated, position staked out by the United States on the FMCT, however, suggests that it will be very difficult to achieve consensus and to take collective action on the issue.

A similar problem is apparent when one examines the stance of those countries surveyed regarding the “13 practical steps” agreed to without a vote at the 2000 NPT Review Conference. Although the United States is nearly alone in its opposition to the CTBT and has opposed or deemed irrelevant many of the other steps, Russia's enthusiasm for a number of the 13 steps also is low. As a consequence, there is little prospect that the 2005 NPT Review Conference will be able to reiterate support for the 13 steps or even to make reference to them collectively despite the widespread support they enjoy on the part of most states, including the NAC and NAM.

The need to strengthen IAEA safeguards and bolster the role played by the currently voluntary Additional Protocol is an area in which many states have a significant interest. Virtually all states examined, with the exception of non-signatories Israel and India, place a high priority on IAEA safeguards. There is less agreement, however, on how to strengthen the current safeguards system. IAEA Director General Mohamed El Baradei recently put forward a proposal to “establish the 'additional protocol' as the norm for verifying compliance with the NPT.” The survey undertaken for this study shows that seven countries regard the additional protocol as a high priority, and seven view it as a moderate priority, suggesting a strong base of support for the protocol and indicating that El Baradei's proposal may have a chance of endorsement at the 2005 Review Conference. Brazil was the only NPT signatory surveyed that viewed the Additional Protocol as a low priority, most likely due in large part to its recent dispute with the IAEA over verification

of its uranium enrichment activities. Even Brazil's stance, however, has moderated in recent months and it is conceivable that it will sign the Additional Protocol prior to the start of the Review Conference, which will be chaired by Brazilian diplomat, Ambassador Sergio Duarte. Although a number of NAM countries are uneasy about an increased emphasis on nonproliferation safeguards without a corresponding focus on disarmament, there appears to be growing recognition on the part of most states of the value of strengthened safeguards—a trend that may enable the Review Conference to embrace the Additional Protocol as the common standard for nonproliferation safeguards.

Proposals for time-bound nuclear disarmament have also traditionally divided the NWS and the NNWS. This study's survey found that time-bound disarmament remains a divisive concept. The NAM historically has advocated this approach, and the survey shows that a number of NAM members still view it as a high priority, such as India, Indonesia, and Egypt. Several other countries, including some members of the NAC (e.g., South Africa and Brazil) and NAM (also South Africa) view this approach as a moderate-level priority. Non-nuclear U.S. allies, such as Germany, Spain, and South Korea, on the other hand, give this approach low priority, and regard it as unproductive. The nuclear weapon states, reflected in our survey by the United States and Russia, continue to object to this approach as inappropriate, giving it low priority. France, while not included in our survey, has taken a particularly hard-line stance since the 2000 NPT Review conference on anything hinting at time-bound nuclear disarmament, insisting on linkage with general and complete disarmament. Overall, the survey shows that there is little prospect of breaking the traditional deadlock on this issue.

	UNSCR 1540	PSI	Sanctions	Export Controls	Counter- proliferation	Arms Transfers	Time-bound nuclear Disarmament
Brazil	Moderate	Low	Moderate	Moderate	Low	Low	Moderate-High
China	Moderate- High	Low	Low	High	Low	Low	Low
Egypt	Low	Low	Low	Low	Low	High	High
Germany	High	Moderate	Low	High	Low	Low	Low
India	High	Moderate	Low	Moderate	Low	Moderate	High
Indonesia	Low	Low	Moderate	Low	Low	Low	High
Iran	Low	Low	Low	Low	Low	Moderate	High
Israel	High	High	High	High	High	Moderate	Low
Japan	High	Moderate	Low	High	Low	Low	Moderate
Pakistan	Low	Low	Low	Moderate	Low	High	High
ROK	Moderate	Low- Moderate	Low	Moderate- High	Low- Moderate	N/A	Low
Russia	Moderate	Moderate	Low	Moderate	Low	Low	Low
Spain	High	Moderate	Low	High	Low	Low	Low
South Africa	Moderate	Low	Moderate	High	Low	Low	Moderate
Sweden	High	Moderate	Low	High	Low	Low	Moderate
U.S.	Moderate	High	High	High	High	Moderate	Low

Historically, it has been difficult to forge consensus on nonproliferation strategies that emphasize export controls. More often than not, the NWS attach greater importance to the approach than NNWS (and especially members of NAM), which are more inclined to regard export controls as impeding their access to the perceived benefits of peaceful nuclear energy. This divergence of views among states regarding export controls in general, and the Nuclear Suppliers Group (NSG) in particular, is reflected in the survey. Nine countries were ranked as attaching high importance to export controls as a nonproliferation strategy, although one might argue that many of them are most supportive of the approach when it does not apply to them. A smaller number of states—Germany, Japan, Spain, Sweden, and the United States—regard the NSG as a high priority nonproliferation approach. Although few countries in the survey were ranked as treating export controls as a low priority—Egypt, Indonesia, and Iran—a larger number were skeptical of the value of the NSG, which they tend to regard as a suppliers' cartel. Although revelations about the activities of the A.Q. Khan nuclear supply network have led more states to recognize the need to improve controls over nuclear exports, a

significant gulf still separates many of the NWS and NNWS over the priority and urgency of adopting strengthened controls on nuclear commerce. These divergent views will make it very difficult to adopt strong language on the subject at the 2005 Review Conference.

Many of the differences noted above with respect to export controls also can be discerned regarding national perspectives on the U.S.-led Proliferation Security Initiative (PSI), an approach designed to promote international collaboration in preventing the illicit trafficking of WMD technology and materials. The United States and Israel are the only countries in the survey that were ranked as displaying high interest in this nonproliferation measure, although a number of other U.S. allies (Germany, Japan, Spain) also recognize the value of the approach as do Sweden and Russia. By contrast, the majority of the NAC and NAM states in our survey, as well as China, are skeptical of the PSI and/or regard it with some alarm. These views are perhaps driven by concern that it could violate their sovereignty. Nevertheless, although the approach lacks anything resembling consensus, the PSI has rapidly expanded its adherents and has made some inroads among even the NAM, although not those in our survey.

Counterproliferation, a term usually interpreted to mean direct military action to block or roll back proliferation, has few strong advocates among those surveyed; only the United States and Israel gave a “high” ranking to this approach. Indeed, there was widespread opposition to counterproliferation as a nonproliferation tool. Not only did ten of the states in the survey treat the approach as a “low” priority, but many regarded it as very counterproductive. This orientation appears to have been reinforced in the aftermath of the 2003 U.S. invasion of Iraq.

The use of conventional arms transfers as a nonproliferation tool—referred to by some analysts as the “dove's dilemma”—is another potential nonproliferation strategy that received little endorsement by most of the countries surveyed. The only countries that showed high interest in this approach are Egypt and Pakistan, both of which have in the past benefited from U.S. conventional arms transfers intended to dampen pressures to develop nuclear weapons. Iran, Israel, the United States, and India all display moderate interest in this policy approach, but for very different reasons. Given the controversial nature of the issue and the diversity of views by states about its appropriateness, it is inconceivable that states will adopt a common position regarding the supply of conventional arms as a nuclear proliferation disincentive. Instead, the approach is likely to continue to be advocated and employed unilaterally or by small coalitions of the willing.

The use of sanctions, while long favored by the United States as an instrument of pressure that can be used to promote nonproliferation, does not enjoy much support from other countries, many of whom see themselves on the receiving end and regard them as a last resort, just short of military action. The experience of UN sanctions against Iraq, which appear to have crippled the Iraqi WMD program, but at great cost to Iraqi society has made many countries even more skeptical about their utility as a nonproliferation policy tool. The United States stands alone in the survey in ranking sanctions as a high

priority policy. A few other countries (South Africa, Brazil, and Indonesia) rank them as moderate, while the rest of those surveyed give them low priority. Sanctions thus appear likely to remain a nonproliferation tool of the United States, which even many of its allies are reluctant to endorse.

One of the most significant new nonproliferation initiatives is UN Security Council Resolution 1540, which directs all states to adopt and enforce effective laws to prohibit any non-state actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical, or biological weapons and means of delivery. This resolution, adopted in April 2004, further directs all states to develop and maintain appropriate physical protection and accounting measures over these weapons of mass destruction and related materials, as well as appropriate effective border controls to detect, deter, prevent, and combat illicit trafficking in such items. Spurred to action by the disclosure of the A.Q. Khan network, UN Security Council Resolution 1540 demonstrates that consensus—at least in the Security Council—can be achieved for new proliferation initiatives when there is strong political will on the part of the P-5. What remains less clear is the extent to which 1540 will be implemented, given the lack of priority attached to the issue by some states, the lack of resources readily available for implementation by many others, and reservations by a number of states, including some close allies of the United States, about the appropriate role for the Security Council in “legislating” nonproliferation measures. This divergence of views is reflected in the survey where seven states attach high priority to 1540, five view it as a moderate priority, and three members of NAM (Egypt, Indonesia, and Iran) regard it as a low-and inappropriate-approach. Although Pakistan did not block consensus on the resolution during the Security Council debate, it also expressed major reservations about the measure and has not been enthusiastic about its implementation.

NWFZ		Security Assurances		
	NWFZ		Positive	Negative
Brazil	Moderate	Brazil	Low	Moderate
China	High	China	Low	High
Egypt	High	Egypt	Low	High
Germany	High	Germany	High	High
India	Low	India	High	Moderate
Indonesia	Moderate	Indonesia	Low	High
Iran	High	Iran	Low	High
Israel	Low	Israel	Low	Low
Japan	High	Japan	High	High
Pakistan	Moderate	Pakistan	?	Low
ROK	Moderate	ROK	High	Moderate-High
Russia	Low	Russia	Moderate	Moderate
Spain	High	Spain	High	High
South Africa	Moderate	South Africa	Low	High
Sweden	High	Sweden	Moderate	High
U.S.	Moderate	U.S.	High	Low

The recent conclusion (February 9, 2005) by the Central Asian states (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) of a draft treaty establishing a nuclear-weapon-free zone (NWFZ) in Central Asia is indicative of the disarmament and nonproliferation potential of NWFZ. In general, there is strong support for the NWFZ concept among the states surveyed and across most of the political groupings. Seven states were identified as attaching a high priority to NWFZ, and another six were viewed as regarding the creation of NWFZ as a moderate priority. Although all NWS profess to support the concept of NWFZ at the declaratory level, in practice they have great difficulty in finding a NWFZ they like. A key question, for which the survey does not provide a clear answer, is the extent to which the generally high level of support for the NWFZ concept can be translated into concrete action, such as the creation of additional NWFZ and the conclusion of their protocols by the NWS. The behavior of the NWS with respect to the Central Asian NWFZ is likely to prove to be an important test case.

Security assurances represent another related but more divisive issue. A long standing divide has split the non-nuclear weapon states, which want legally binding negative security assurances, from most of the nuclear weapon states, which generally are unwilling to give them other than in the context of protocols to NWFZ. The United States, for example, regards negative security assurances as a low priority, although many of its non-nuclear allies, such as Germany, Japan, and Spain regard them as a high priority. Most of the New Agenda Coalition countries in our sample (Egypt, Sweden, and South Africa) also regard negative security assurances as an important nonproliferation approach, as does most of the NAM, exemplified in this case by Indonesia. China, interestingly, still maintains a public posture in which negative security assurances are a pillar of its nonproliferation policy. There are some indications, however, of significant internal debate about this issue and there is increasing public criticism of the policy under circumstances in which Taiwan might initiate a strike at targets on the Chinese mainland. Although a number of states, including South Africa, are apt to emphasize tough language on negatives security assurances in the context of the NPT review process, the issue is likely to be hotly debated and strongly opposed by at least several of the NWS. The issue of positive security assurances tends to be less contentious, although there is no convergence of views among the states surveyed. It is likely that some NWS, such as the United States, will continue to offer positive security assurances to its close allies whether or not the approach is blessed by other states.

Technical fixes

	Alternative Fuel Cycles	Research Reactor Conversion	Plutonium Disposition	HEU Consolidation/ Elimination/ GTRI
Brazil	Low	Low	Low	Low
China	Low	Low	Low	Low
Egypt	Low	Low	Low	Low
Germany	Moderate	Moderate-High (as long as not a German reactor)	High	Moderate
India	Low	Low	Low	Low
Indonesia	Low	Low	Low	Low
Iran	Low	Low	Low	Low
Israel	Low	Low	Low	Low
Japan	Moderate	Moderate	High	Moderate
Pakistan	Low	Low	Low	Low
ROK	Moderate	Moderate	Moderate	Moderate
Russia	High	Low	High	Low-Moderate
Spain	Moderate	Moderate	Moderate	Moderate
South Africa	Low	Low	Low	Low
Sweden	Moderate	Moderate	Moderate	High
U.S.	Low	Moderate	Moderate	High

Recent revelations about the Iranian, Libyan and North Korean nuclear programs have led to renewed calls to find technical fixes to proliferation challenges, such as alternative fuel cycles, conversion of research reactors to low-enriched uranium (LEU); consolidation and/or elimination of highly-enriched uranium (HEU), and long-term disposition of plutonium. Although several states surveyed are enthusiastic about the potential for technical approaches to solve major proliferation problems, they represent a clear minority perspective. Alternative fuel cycles and the introduction of new proliferation-resistant reactors, for example, are a high priority mainly for Russia. Other countries, although not typically opposing the concept, either tend not to attach much importance to the approach or to regard it as not particularly promising. As a consequence, although there has been considerable interest in and activity at the IAEA

championed by Russia, steps forward are likely to be taken mainly by individual countries or small groupings of them.

Judging from the huge turn-out at the first international conference focused on the Global Threat Reduction Initiative (GTRI), held in Vienna in September 2004—more than 575 representatives from over 90 countries—one cannot discount the possibility for broad collective action to convert research reactors globally to LEU and to repatriate Soviet-origin HEU. Although the approach merits great attention due to the widespread availability of inadequately safeguarded civilian stocks of HEU, few of the states surveyed appear to attach great importance to either reactor conversion or HEU consolidation and/or elimination as priority nonproliferation approaches. Only the United States and Germany regard reactor conversion to be more than a moderate priority (and then only when their own reactors are not targeted), while the United States and Sweden are the only countries in the sample which emphasize the high importance of HEU consolidation. Although Russia nominally has joined the United States in the GTRI, it has invested few resources in the effort and has tended to be far more interested in efforts to secure, consolidate, and eliminate radioactive sources than fissile material. Because few states actively oppose the initiative—mainly those outside of the survey which regard their HEU stocks as bargaining chips on a variety of other issues—it may be possible to create relatively broad coalitions of the willing as long as the United States provides strong political leadership and most of the resources needed for conversion and consolidation/elimination. It remains to be seen, however, if the United States will assume either the necessary leadership or financial resources to achieve those objectives.

Plutonium disposition likewise is primarily a concern for a small group of countries that have significant stocks of plutonium, such as Russia, Germany, and Japan. The United States currently displays only moderate interest in this issue, while most other states surveyed regard it as a low priority with little direct impact on them. As a consequence, collective action is unlikely, although joint action by a coalition of the willing, perhaps through the mechanism of the G-8 Global Partnership, may be possible if one can reach agreement about the mode and financing of plutonium disposition.

	CTR and Associated Programs MPC&A	G-8 Global Partnership	Strengthened Norms	Security Alliances	Regional Security/ Stability	Peaceful Use (Article IV)
Brazil	Low	Low	High	Low	High	High
China	Moderate	Moderate	High	Low	High	High
Egypt	Low	Low	High	Low	High	High
Germany	High	High	High	High	High	Moderate
India	Low	Low	Moderate	Moderate	High	High
Indonesia	Low	Low	High	Low	High	High
Iran	Low	Low	High	Low	High	High
Israel	High	Low	Low	High	Varies	Low
Japan	High	High	High	High	High	High
Pakistan	Low	Low	Low	Moderate	Moderate	Moderate
ROK	Moderate- High	Moderate- High	Moderate- High	High	High	High
Russia	Moderate	High	Low	High	High	High
Spain	Moderate	Moderate	High	High	High	Moderate
South Africa	Low	Moderate	High	Low	High	High
Sweden	High	High	High	Low	High	Moderate
U.S.	High	High	Low	High	High	Low

	Education	Intelligence Sharing	Assurances of Energy/ Fuel Supply	Multinational Nuclear Fuel Centers	Economic/ Technology Incentives
Brazil	Moderate	High	Low	Low	Low
China	Moderate	Moderate	Low	Low	
Egypt	Moderate-High	High	Low	Low-Moderate	High
Germany	Moderate	High	High	(check Larry)	High
India	Moderate	Moderate	Moderate	U/D	High
Indonesia	Moderate	High	Low	Low	Low
Iran	High	Low	High	Low	High
Israel	Low	High	Low	High	Low
Japan	High	High	Moderate	Low	Moderate
Pakistan	Low	Moderate	Low	Low-Moderate	Moderate
ROK	High	High	Moderate	Moderate	Moderate
Russia	Low	Moderate	Moderate	High	Low
Spain	Low	Moderate-High	Low	Low-Moderate	High
South Africa	Moderate	High	Low-Moderate	Low	Low
Sweden	High	Moderate	Moderate	Moderate	Moderate
U.S.	Low	Moderate-High	Low	Moderate-High	High

The survey reviewed positions on a number of policy initiatives linked to technical issues, such as multinational nuclear fuel centers, economic/technology incentives, assurances of energy/fuel supply, and the importance of peaceful use of nuclear energy. Overall, the peaceful use of nuclear energy still receives high levels of support as a nonproliferation strategy. It is regarded as especially important by the NNWS, especially members of NAM. Brazil, Egypt, Indonesia, Iran, and South Africa all gave it high priority, as did Japan, South Korea, and China. Another four countries gave it a moderate priority, with only Israel attaching low importance to the peaceful use as an approach to nonproliferation, almost certainly due to concerns about its potential abuse by countries such as Iran. The United States and Russia both have mixed views on this subject, supporting peaceful use in principle, but having concerns about its possible misuse for weapons purposes. Russia, influenced in part by economic considerations in the form of

potentially lucrative nuclear exports, is more sanguine than is the United States about existing arrangements. Although the United States does not dispute the importance of peaceful use as part of the NPT bargain, it, along with a number of its allies, are increasingly concerned about how one can prevent the exploitation of Article IV for weapons development purposes.

The ambivalent nature of the U.S. commitment to Article IV is exemplified by the February 2004 proposal by President Bush to prevent any additional countries from acquiring uranium enrichment or plutonium processing capability. If implemented, this proposal would preclude additional countries from acquiring control over the full nuclear fuel cycle, thereby reducing one dimension of the proliferation risk. Since a number of countries regard control over the fuel cycle as either actually, or at least potentially, valuable to their energy independence, the president's proposal has met a cool reception internationally. At the June 2004 plenary session of the Nuclear Suppliers' Group, for example, the Bush proposal was introduced by the United States, but not endorsed by the full group. A number of countries, including South Africa, France, and Brazil, reportedly opposed the Bush proposal at the meeting. At the 2004 G-8 Sea Island summit meeting, on the other hand, the G-8 agreed to a temporary one-year moratorium on exports of these technologies to countries that do not already possess them.

The establishment of multinational fuel centers is an example of an old approach that has been revived as a possible solution to the potential abuse of Article IV for the purpose of developing nuclear weapons. This idea, which first gained considerable currency during the International Nuclear Fuel Cycle Evaluation deliberations in the late 1970s, is supported by a number of countries—including Russia—that presumably would be the suppliers of fuel to such centers. But many countries that would be potential customers for fuel supplied by such centers, for example, Brazil, Egypt, Indonesia, Iran, and Japan, regard the approach with little interest. They regard it either as undermining their right to develop a national fuel cycle capability, or as presenting a serious threat to their energy independence. Japan, in particular, has even implied that multinational nuclear fuel centers might stimulate proliferation. Although it is possible that further discussions among experts will identify some useful ideas about which there is a convergence of views—most likely with respect to the back-end of the fuel cycle—the multinational nuclear fuel center approach is unlikely to garner sufficient support from a broad coalition of states to move forward in the short term. As with many solutions that appear at first blush to be “technical,” in nature, those dealing with the fuel cycle have a very political dimension which must be addressed if progress is to be made on the technical front.

Economic and technology incentives may be thought of as the provision of economic and technical benefits as a nonproliferation carrot, as is reportedly being offered to Iran in the current talks with the European Union, and was offered in the past to North Korea as part of the Agreed Framework. This general approach appears attractive to an eclectic group of countries, but is not embraced by all of them with respect to prospective recipients. The United States, for example, at least until very recently, has been reluctant to trade economic incentives to Iran as a means to encourage proliferation restraint. Historically,

however, it has been far more sympathetic to that approach, and applied it with good effect in Ukraine, Kazakhstan, and Belarus. Russia, on the other hand, often has been very amenable to offering nuclear assistance to both NPT and NPT member states, an approach which Moscow likes to characterize as supportive of nonproliferation, although other parties are more inclined to see as driven by domestic economic considerations. Continuing Russian nuclear assistance to India, in particular, has been criticized by many of the NSG states as contrary to NSG guidelines and as sending the wrong signals about the benefits to be derived from NPT membership.

The Nunn-Lugar Cooperative Threat Reduction Program, associated nonproliferation assistances initiatives, as well as the G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, are viewed as a priority by a relatively small but affluent group of countries in the survey. They include the United States, Japan, Germany, and, to a slightly lower degree, Russia, which supports the concept but is skeptical about some program priorities as well as the pace of delivery of funds. Although a number of countries in the survey do not attach high importance to the CTR or Global Partnership approach, the ranking is due primarily to the lack of perceived relevance to their own country's security needs and does not reflect active opposition to the approach. To date, most of these programs are viewed as primarily directed at proliferation challenges in the former Soviet Union. A broadening of their focus, as sought by Senator Richard Lugar among others, is probably necessary if more countries are to be convinced of their relevance and to be engaged actively in their implementation.

Intelligence sharing is seen as a key nonproliferation tool by almost all of the states surveyed. Every state but Iran recognized it as a high or moderate priority. The problem, however, lies in the modalities of cooperation, the number of parties involved, and the manner in and extent to which multinational institutions participate in the process. Thus, although many countries traditionally have voiced support for the principle of intelligence sharing on nonproliferation matters, it has proved difficult to implement in practice. One might expect, for example, that given the convergence of U.S. and Russian views on the threat posed by nuclear material trafficking and braindrain, and the precedent of intelligence sharing to combat terrorism, that U.S.-Russian intelligence sharing to prevent nuclear leakage would already be well developed. The record to date, however, is spotty at best, and intelligence sharing among international organizations with responsibility for nonproliferation does not appear to be much better. Although the growing recognition of the threat posed by non-state actors may remove some barriers to effective intelligence sharing, it remains to be seen how broad-based or enduring such collaboration will be.

Strengthening nonproliferation norms is another approach viewed as a high priority by almost all states. The United States and Russia stand out as exceptions among NPT states parties who give this approach low priority, in part because of the logical contradiction between the maintenance of their own robust nuclear arsenals and efforts to prevent other states from following their examples. Although the remaining NPT states parties in the survey, including U.S. allies, the NAM, and the NAC all believe that nonproliferation norms should be given a high priority, prospects for progress in building a consensus on

this issue are not encouraging as long as the NWS continue to attach high value to their own nuclear arsenals.

Education is a very new and underutilized approach to promoting nonproliferation and disarmament. It only has emerged as an issue internationally in 2000 when a UN General Assembly resolution created a group of government experts to make recommendations on the subject. The approach, however, has been seized upon by a number of states as a relatively non-contentious issue with the potential to have important long-term impact on global nonproliferation norms, as well as more immediate practical applications to meeting proliferation challenges. Among the countries surveyed, Japan and Sweden view the approach as especially important and have taken the lead in international fora such as the First Committee and the NPT review process to promote implementation of the Expert Group's recommendations. A number of other states, including Brazil, China, Egypt, India, Indonesia, South Africa, and Russia also have expressed support for the general approach, and have co-sponsored a resolution on the subject at the fall 2004 General Assembly. Surprisingly, the United States, which has by far the most experience in nonproliferation pedagogy, has to date not sought to promote (or obstruct) the approach. Based upon the strong, diverse, and growing support at the 2002, 2003, and 2004 NPT Preparatory Committee meetings for education and training as a tool for encouraging disarmament and nonproliferation, there is a very good prospect for consensus language on the topic at the 2005 NPT Review Conference.

Fostering regional security and stability is viewed as a high priority by almost all countries surveyed. The key difficulty pertains to the fact that countries define regional security and stability very differently, and prefer widely divergent strategies to achieve their goals. These differences are manifest when one examines the perceived utility of alliances as an approach to enhance regional security. For example, although the members of NATO regard that alliance as an important means to enhance their collective security, to promote stability in the region, and to prevent proliferation, it is perceived very differently in Moscow. By the same token, Russian efforts to enhance regional security in Central Asia by means of the Tashkent Treaty on Collective Security is viewed in Washington with some apprehension as it is seen as a means by which Russian may extend the deployment of its nuclear forces under certain circumstances. More generally, security alliances and guarantees tend to be regarded by their members/recipients as important instruments for promoting regional security and nonproliferation, although they are likely to be viewed with indifference from states outside of the region and by states in the region which are outside of the alliance.

IV. CHALLENGES AND OPPORTUNITIES

What are the challenges and opportunities for nonproliferation cooperation based on the preceding review of national threat perspectives and preferred nonproliferation strategies? Is there sufficient convergence of threat assessments and preferred strategies for control to fashion a broad-based, multilateral approach to combat new and evolving nuclear challenges or must one rely increasingly upon ad hoc “coalitions of the willing” or even unilateral action? To the extent that one can discern convergent threat

perceptions, do they lend themselves to enduring nonproliferation partnerships founded in negotiated legal regimes and organizations or should one be content with less formal mechanisms tailored to specific exigencies?

On the one hand, it is relatively easy to point to the results of the survey and the accompanying analysis in support of a conclusion that divergences are so great on so many issues that a broad-based multilateral approach to combating new proliferation threats is no longer possible. According to this interpretation, divisions over old issues like the pace of nuclear disarmament and the failure of the Comprehensive Test Ban Treaty to enter into force persist at the same time that the international community finds it difficult to make headway in a collective fashion in addressing new threats such as non-state actors and nuclear weapons. This view resonates among some key U.S. policy-makers, who suggest that ad-hoc coalitions of the willing are better suited to acting quickly and effectively to counter the proliferation challenges posed by state-sponsors of terrorism and terrorists themselves. The U.S.-led PSI is often held up as the prototype for a new, less universal, but more flexible and efficient nonproliferation strategy.

The results of the CNS survey suggest that there are only a few key proliferation threats and nonproliferation strategies on which there is broad-based agreement. For example, while Iran and North Korea are widely viewed as the most urgent state-level proliferation threats, there are major differences among states regarding the urgency of the threat and the best methods for addressing it. And while the overwhelming majority of the countries surveyed support the NPT, they do not necessarily support a common agenda of concrete, practical steps to help the treaty better cope with contemporary challenges. This problem is well illustrated by the difficulty states parties are having in finding common ground to remedy even those aspects of treaty shortcomings for which there is considerable agreement (e.g., the lack of attention to non-state actors and the abuse by a small number of states of Article IV and Article X). More often than not, states parties in the NPT Review Process appear unwilling or unable to tackle the hard proliferation issues, preferring either to put aside the most difficult and pressing problems or settling on a lowest common denominator approach. Although this strategy may appear to “buy time” and protect the treaty from a fractious debate, in fact, it probably contributes to the weakening of the NPT and the review process and gives credibility to charges by its critics about the declining relevance of the treaty.

Nevertheless, it would be premature to conclude from the survey that an enduring multilateral nonproliferation regime is obsolete. While it is correct to assert that broad-based, traditional multilateral approaches may not be tenable for some of the most pressing proliferation problems, there are several important areas where progress would appear to be possible, both within and outside of the formal NPT review process.

The survey indicated a high level of support for and little opposition to the Additional Protocol. To the extent that this support among the study's sample is reflected in the broader universe of NPT states parties, it may be possible to make the Additional Protocol the safeguards standard under the NPT, a step which could significantly increase confidence that peaceful nuclear technology was not being abused. If the 2005 Review

Conference were able to reach agreement on this approach, it would be an important step in demonstrating the continued relevance and adaptability of the NPT to new and evolving nuclear proliferation challenges.

Based upon the survey findings regarding the dangers of defections from the NPT, it is conceivable that states parties might agree on a reinterpretation of the process by which states can withdraw from the treaty and the consequences of such action. The 2005 NPT Review Conference will need to address this issue in the context of North Korea's decision on withdrawal. Although there may not be adequate time at the forthcoming Review Conference to forge consensus on this relatively new problem, it should be possible to have a constructive debate on the issue and to identify at least the outlines of an approach for reducing the incentives for and increasing the costs of exploiting the treaty for the purpose of achieving a near nuclear-weapons status.

Much of the preceding analysis has sought to apply the survey's findings to the upcoming NPT Review Conference. It is important to emphasize, however, that the NPT review process is only one of a number of important multilateral fora in which to develop practical responses to nuclear proliferation challenges. UN Security Council Resolution 1540 is illustrative of the potential (and limitations) afforded by Security Council action in the nonproliferation sphere. If Security Council Resolution 1540 is implemented in an effective manner, which will require that most states genuinely believe that it enhances their national security, it has could serve as a model for further Security Council action on nonproliferation issues. Both conditions, however, must prevail if 1540 is to be emulated. In this regard, nonproliferation education and training may prove to be an important tool, helping to change mindsets and to foster critical thinking skills.

The CNS survey of national threat perceptions and preferred nonproliferation strategies suggests that while significant, if limited, opportunities remain for broad-based multilateral action, it will prove very difficult to gain support for collective action to address other nuclear challenges that many but not all states perceive to be acute. Timely and effective action on these issues may require alternative responses involving more limited coalitions. Efforts to secure, consolidate, and reduce stocks of fissile material in the former Soviet Union, for example, may best be accomplished by collaboration among like-minded states for which the issue is a high priority. The same is true with respect to issues such as creating new NWFZs, where the driving force for action emanates from the states in the region concerned. In these instances, where there is little opposition to the initiative even if support is not widespread, coalitions of the willing serve as a useful supplement to rather than substitute for more widespread, collective action.

Regrettably, the survey indicates that states are deeply divided about what constitute some of the most pressing proliferation challenges and also how best to tackle them. On these issues, action by small coalitions may be the only way in which timely steps can be taken, but at the risk of jeopardizing the larger legal and normative underpinnings of the NPT and its associated multilateral institutions. This tension is perhaps most acute with respect to country-specific proliferation threats involving noncompliance—an issue of

great importance to some NPT states parties, but for which others are unlikely to sanction tough, collective action.

It was not the intent of this study to offer a solution to the extraordinarily complex problem of devising nonproliferation approaches to meet new and continuing nuclear threats that have the promise to be both effective and to enjoy widespread support. At best, the fault lines may be somewhat clearer as well as the opportunities for bridging a few of the divides. That information may not be encouraging, but it is a necessary condition for estimating where nonproliferation progress is likely, possible, and improbable.

List of published studies and papers

All papers and studies are available as pdf-files at the Commission's website: www.wmdcommission.org

- No 1** "Review of Recent Literature on WMD Arms Control, Disarmament and Non-Proliferation" by Stockholm International Peace Research Institute, May 2004
- No 2** "Improvised Nuclear Devices and Nuclear Terrorism" by Charles D. Ferguson and William C. Potter, June 2004
- No 3** "The Nuclear Landscape in 2004: Past Present and Future" by John Simpson, June 2004
- No 4** "Reviving the Non-Proliferation Regime" by Jonathan Dean, June 2004
- No 5** "Article IV of the NPT: Background, Problems, Some Prospects" by Lawrence Scheinman, June 2004
- No 6** "Nuclear-Weapon-Free Zones: Still a Useful Disarmament and Non-Proliferation Tool?" by Scott Parrish and Jean du Preez, June 2004
- No 7** "Making the Non-Proliferation Regime Universal" by Sverre Lodgaard, June 2004
- No 8** "Practical Measures to Reduce the Risks Presented by Non-Strategic Nuclear Weapons" by William C. Potter and Nikolai Sokov, June 2004
- No 9** "The Future of a Treaty Banning Fissile Material for Weapons Purposes: Is It Still Relevant?" by Jean du Preez, June 2004
- No 10** "A Global Assessment of Nuclear Proliferation Threats" by Joseph Cirincione, June 2004
- No 11** "Assessing Proposals on the International Nuclear Fuel Cycle" by Jon B. Wolfsthal, June 2004
- No 12** "The New Proliferation Game" by William C Potter, June 2004
- No 13** "Needed: a Comprehensive Framework for Eliminating WMD" by Michael Krepon, September 2004
- No 14** "Managing the Biological Weapons Problem: From the Individual to the International" by Jez Littlewood, August 2004
- No 15** "Coping with the Possibility of Terrorist Use of WMD" by Jonathan Dean, June 2004
- No 16** "Comparison of States vs. Non-State Actors in the Development of a BTW Capability" by Åke Sellström and Anders Norqvist, October 2004
- No 17** "Deconflating 'WMD'" by George Perkovich, October 2004
- No 18** "Global Governance of 'Contentious' Science: The Case of the World Health Organization's Oversight of Small Pox Virus Research" by Jonathan B. Tucker and Stacy M. Okutani, October 2004
- No 19** "WMD Verification and Compliance: The State of Play" submitted by Foreign Affairs Canada and prepared by Vertic, October 2004
- No 20** "WMD Verification and Compliance: Challenges and Responses" submitted by Foreign Affairs Canada, October 2004
- No 21** "Meeting Iran's Nuclear Challenge" by Gary Samore, October 2004
- No 22** "Bioterrorism and Threat Assessment" by Gary A. Ackerman and Kevin S. Moran, November 2004
- No 23** "Enhancing BWC Implementation: A Modular Approach" by Trevor Findlay and Angela Woodward, December 2004
- No 24** "Controlling Missiles", by Jonathan Dean, December 2004
- No 25** "On Not Confusing the Unfamiliar with the Improbable: Low-Technology Means of Delivering Weapons of Mass Destruction" by Dennis M. Gormley, December 2004
- No 26** "A Verification and Transparency Concept for Technology Transfers under the BTWC" by Jean Pascal Zanders, February 2005
- No 27** "Missing Piece and Gordian Knot: Missile Non-Proliferation" by Mark Smith, February 2005
- No 28** "The Central Importance of Legally Binding Measures for the Strengthening of the Biological and Toxin Weapons Convention (BTWC)" by Graham S. Pearson, February 2005
- No 29** "Russia in the PSI: The Modalities of Russian Participation in the Proliferation Security Initiative" by Alexandre Kaliadine, August 2005
- No 30** "Indicators of State and Non-State Offensive Chemical and Biological Programmes" edited by Ingrid Fångmark and Lena Norlander, August 2005
- No 31** "The 2005 NPT Review Conference: Reasons and Consequences of Failure and Options for Repair" by Harald Müller, August 2005
- No 32** "National Measures to Implement WMD Treaties and Norms: the Need for International Standards and Technical Assistance" by Andreas Persbo and Angela Woodward, August 2005
- No 33** "Russia and the Chemical Disarmament Process" by Sergey Oznobistchev and Alexander Saveliev, August 2005
- No 34** "Transparency and Secrecy in Nuclear Weapons" by Annette Schaper, August 2005
- No 35** "Multilateral Nuclear Fuel-Cycle Arrangements" by Harald Müller, August, 2005
- No 36** "Nuclear Threat Perceptions and Nonproliferation Responses: A Comparative Analysis" by Scott Parrish and William C. Potter, August, 2005
- No 37** "WMD Crisis: Law Instead of Lawless Self-Help" by Harald Müller, August, 2005

WMDC

THE WEAPONS OF
MASS DESTRUCTION
COMMISSION

www.wmdcommission.org