Reformation and Resistance: Nongovernmental Organizations and the Future of Nuclear Weapons

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About the Author

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This report had its origins in the efforts of the Stimson Center and many other nongovernmental organizations to foster creative discussion and analysis of the nuclear risks and dangers facing the United States and other nations after the end of the Cold War. The Center's project on Eliminating Weapons of Mass Destruction, which I directed for four years (1994-98), sought in particular to legitimize serious discussion and study of the phased elimination of all weapons of mass destruction. In undertaking this work, we were motivated by a belief that the changing international strategic environment necessitated a fresh look at US nuclear policy and doctrine, as well as the United States' long-term arms control objectives. After completing that four-year effort, we rightly paused to ask what the Center and other NGOs had achieved and where we had fallen short, and why. This report reflects a first attempt to evaluate the effectiveness of the work of the Stimson Center and many other organizations and individuals to encourage a fundamental reexamination of our approach to nuclear weapons.

This report would not have been possible without the assistance of many people. The Stimson Center is grateful to the Ford Foundation for its continued support of the Center's efforts to encourage fresh thinking about nuclear weapons and the risks they pose. We are particularly grateful in this regard to Christine Wing. I would also like to thank William Durch, Michael Krepon and Banning Garrett for their many helpful comments on earlier drafts of this report, as well as Caroline Earle, Christopher Gagne and Matthew Jackson for their research support. As always, Jane Dorsey provided invaluable assistance in preparing the manuscript for publication.

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<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BASIC</td>
<td>British American Security Information Center</td>
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<tr>
<td>BM</td>
<td>Ballistic Missile</td>
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<td>CD</td>
<td>Conference on Disarmament</td>
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<td>CND</td>
<td>Campaign for Nuclear Disarmament</td>
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<td>CIA</td>
<td>Central Intelligence Agency</td>
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<tr>
<td>CTBT</td>
<td>Comprehensive Test Ban Treaty</td>
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<td>CTR</td>
<td>Cooperative Threat Reduction</td>
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<td>CWC</td>
<td>Chemical Weapons Convention</td>
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<tr>
<td>Fissban</td>
<td>Ban on fissile material production for military purposes</td>
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<tr>
<td>ICBM</td>
<td>Intercontinental Ballistic Missile</td>
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<tr>
<td>ICJ</td>
<td>International Court of Justice</td>
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<td>IGO</td>
<td>Intergovernmental Organization</td>
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<td>INESAP</td>
<td>International Network of Engineers &amp; Scientists Against Proliferation</td>
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<tr>
<td>MAD</td>
<td>Mutual Assured Destruction</td>
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<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
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<tr>
<td>NBC</td>
<td>Nuclear, biological, chemical</td>
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<td>NFU</td>
<td>No-first-use of nuclear weapons</td>
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<td>NGO</td>
<td>Nongovernmental Organization</td>
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<td>NNWS</td>
<td>Non-nuclear-weapon state</td>
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<tr>
<td>NPT</td>
<td>Nuclear Non-Proliferation Treaty</td>
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<tr>
<td>NSC</td>
<td>National Security Council</td>
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<td>NW</td>
<td>Nuclear weapon</td>
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<td>NWFZ</td>
<td>Nuclear-weapon-free zone</td>
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<tr>
<td>NWS</td>
<td>Nuclear weapon state</td>
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<tr>
<td>PPNN</td>
<td>Programme for Promoting Nuclear Non-Proliferation</td>
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<tr>
<td>PRC</td>
<td>People’s Republic of China</td>
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<td>QDR</td>
<td>Quadrennial Defense Review</td>
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<tr>
<td>SIPRI</td>
<td>Stockholm International Peace Research Institute</td>
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<tr>
<td>START</td>
<td>Strategic Arms Reductions Talks</td>
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<td>T-3</td>
<td>“Threshold” nuclear states (Israel, India, Pakistan)</td>
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<tr>
<td>TAN</td>
<td>Transnational Action Network</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
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<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNGA</td>
<td>United Nations General Assembly</td>
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<tr>
<td>UNSC</td>
<td>United Nations Security Council</td>
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<tr>
<td>US</td>
<td>United States</td>
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<tr>
<td>VERTIC</td>
<td>Verification Research, Training and Information Centre</td>
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<tr>
<td>VNA</td>
<td>Virtual Nuclear Arsenal</td>
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<tr>
<td>WMD</td>
<td>Weapons of Mass Destruction</td>
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Executive Summary

From 1992-99, nongovernmental organizations (NGOs) and committed private citizens sought to draw attention to existing and emerging nuclear dangers and to persuade governments that radical new approaches to nuclear risk reduction were both desirable and feasible. The NGO nuclear agenda included both long-term goals, such as the pursuit of deep cuts in, or the eventual elimination of, nuclear arsenals from all countries, and near-term objectives, such as the rapid ratification and implementation of START II, negotiation of START III, extension of the nuclear Non-Proliferation Treaty (NPT), and completion and implementation of a Comprehensive Test Ban Treaty (CTBT). By 1995, a veritable cottage industry in nuclear disarmament studies had emerged, concentrated in the United States but extending to Europe and Asia as well.

To evaluate the 1990s nuclear debates, the report applies the conceptual and analytical tools developed by Margaret Keck and Kathryn Sikkink in their study of NGO advocacy networks. When NGOs begin to coordinate their actions internationally, "transnational action networks" (TANs) may emerge to "reframe" issues in innovative ways such that publics, governments, or institutional decisionmakers are persuaded to embrace a different solution to a particular policy problem. A defining characteristic of TANs is their ability to use information strategically to persuade and gain leverage over governments. The goals of transnational action networks include issue creation and agenda setting, changes in discursive practices, changes in institutional procedures, changes in policy, and changes in state behavior.¹

The debate on alternative nuclear futures can be divided roughly into three phases:

During the first phase (approximately 1992-95), NGOs and private individuals, primarily but not exclusively in the United States, began to question the traditional assumptions that had guided nuclear policy during the Cold War. By mid-decade, US policy research institutions had produced a steady stream of studies and reports arguing the feasibility and desirability of nuclear disarmament, while prominent retired US military commanders, former defense officials, and grass-roots advocacy groups tried to rouse public interest in old and new nuclear dangers. The core components of the NGO agenda were a sustained verbal commitment to eventual nuclear elimination (a change in discursive policy), and implementation of that commitment through significant reductions in nuclear forces, a new

declaratory policy that explicitly diminished the role of nuclear weapons to the “core function” of deterring other nuclear threats, and massive and fundamental changes in nuclear doctrine consonant with the new interpretation of nuclear roles and compatible with dwindling force levels (changes in policies).

As the zero objective gained legitimacy in the United States, the debate about alternative nuclear futures was spreading to other countries (phase II, 1995-96), spurred by the Canberra Commission report on nuclear elimination and the public endorsement in December 1996 of the elimination objective by 61 retired military commanders from 17 countries.

During phase III (1996-present), souring East-West relations and resurgent proliferation challenges created fissures among NGO activists and shifted the emphasis of their efforts to near-term goals that appeared more feasible – and therefore more credible – in a deteriorating security environment. The NGO focus on numbers gradually began to give way to complex discussions of alternatives to zero, such as de-alerting, nuclear “stand-down,” and “virtual” nuclear arsenals.

Although the NGO campaign failed to persuade governments to undertake radical changes in nuclear policies and doctrines, the nongovernmental community in fact achieved important victories that could provide the foundation for future efforts to further reduce the legitimacy and value of nuclear weapons. First, NGOs made significant progress toward reframing the debate about nuclear risks – an essential steps toward achieving more ambitious objectives. Although many government officials and security experts remained unpersuaded of the desirability or feasibility of eliminating nuclear weapons, NGOs provoked discussion about the political and military value of nuclear weapons in a changing world and about emerging dangers against which nuclear deterrence, as it had evolved during the Cold War, might be ineffective or irrelevant. Second, persistent public pressure from the nongovernmental community as well as quieter track-two diplomatic efforts helped facilitate extension of the NPT and conclusion of the CTBT. In addition, NGO advocacy of radical objectives may have made it easier for governments to adopt goals that otherwise might have encountered forceful domestic opposition, such as lower force level objectives for START III. Third, the nongovernmental helped to strengthen the international norm against proliferation. Finally, the nuclear debates of the 1990s further weakened the claim of governmental officials to a monopoly of expertise and
Executive Summary

wisdom on the nuclear issue and helped to spur the creation of a nascent transnational community of nongovernmental experts.

These accomplishments were achieved in the face of formidable obstacles. The nuclear issue itself created many special challenges for NGOs, since arguments about the relative benefits or risks of alternative courses of action involved conflicting information and often unprovable assertions, thus creating great uncertainty. Additionally, NGOs found it difficult to rally public support, in part because nuclear doctrine and policy tended to be viewed as technical issues that were “best left to the experts.” Moreover, the “cause” of nuclear risks and dangers could credibly be depicted not as a deliberate choice of policymakers but as structural in nature, i.e., rooted in the anarchic international competition among sovereign states. Certain target audience characteristics – in particular, presidential diffidence and the difficulty of gaining access to influential government policymakers -- as well as the difficulties of coordinating a large, diverse, and geographically dispersed collection of organizations and individuals, probably also weakened the NGO campaign. Finally, the degree of support for the NGO nuclear agenda was likely influenced by developments in the international political context, some of which undermined and some of which lent credence to NGO assertions that nuclear elimination was both feasible and desirable and that the world was progressing toward a low salience nuclear world. On the other hand, nuclear dangers never became threatening or real enough -- as they would have through a catastrophic nuclear event -- to galvanize public opinion in favor of far-reaching changes in state policy and behavior.

Despite these shortcomings, a firm foundation for future efforts to advance a new approach to nuclear weapons nevertheless exists. NGOs committed to a new approach to nuclear weapons communicate and exchange information on a regular basis. Although many groups remain divided over priorities and next steps, the possibility of building a community across national boundaries, united behind a common program, remains a near-term prospect. Moreover, the uncertainty and fluidity of the global strategic environment will continue to raise questions about the usefulness of traditional policies and approaches to nuclear weapons. Such uncertainty may cause leaders to err on the side of nuclear orthodoxy; it may also create unique opportunities for NGOS to introduce new ideas and principles into the policymaking process.
INTRODUCTION: NUCLEAR PERILS AND PROMISES

The 1990s began with great promise. The dissolution of the East-West bloc system, collapse of the Soviet Union, and paring of conventional arsenals in Europe seemed to diminish the military and political role of nuclear weapons in European security. Reflecting the favorable turn in their political relations, US President George Bush and Soviet President Mikhail Gorbachev in 1991 undertook parallel unilateral initiatives to remove from operational status thousands of tactical nuclear weapons. By 1993, the START II accord had been completed, opening the prospect that US and Russian strategic nuclear force levels would shrink significantly from Cold War highs. After prolonged negotiations, the Soviet successor republics of Belarus, Kazakstan, and Ukraine were persuaded to give up their nuclear inheritance. These developments offered the hope that nuclear weapons would gradually lose their value as instruments of statecraft and symbols of international status.

Viewing the dramatic changes, a handful of respected US defense experts and former government officials believed that the time was ripe for a fundamental reexamination of the role of nuclear weapons in national policies and in international politics. They were convinced that only the United States could exercise leadership in initiating an overhaul of Cold War policies, doctrines, and postures. With the election of a Democratic president in 1992, the first in twelve years, the domestic political constellation appeared favorable for a fundamental departure in the US approach to nuclear weapons.

The push for radical changes in US nuclear policy would not come from within government, however. The institutions responsible for nuclear policymaking had powerful vested interests in preserving the status quo. Institutional budgets and missions, as well as personal careers and ambitions, constituted powerful impediments to change, as many well-intentioned political appointees quickly discovered. Only those external to the process—so-called "civil society" players—appeared capable of bringing supra-institutional pressure to bear on those in the inner sanctum of nuclear decisionmaking. Among civil society actors,
however, some were better suited to this role than others. Businesses, for example, might have institutional ties to the military, while public opinion was too unfocused and diffuse to achieve specific changes in policy. It would fall to the organized elements of civil society—above all, nongovernmental organizations (NGOs)—to advance a new nuclear agenda.

They did so with great diligence. From 1992-99, numerous NGOs and committed private citizens urged the Clinton administration to reduce US reliance on nuclear deterrence and to consider seriously the complete elimination of nuclear weapons, along with other weapons of mass destruction. By mid-decade, a veritable cottage industry in nuclear disarmament studies had emerged, concentrated in the United States but extending to Europe and Asia as well. The participants in the debate on alternative nuclear futures were academic and policy research institutions, Washington-based advocacy organizations, prominent retired civilian policymakers and military commanders, foundations, and grass-roots citizen action groups. Through publications, conferences, and public events, the nongovernmental community sought to draw attention to existing and emerging nuclear dangers and to persuade governments that radical new approaches to nuclear risk reduction were both desirable and feasible. The new nuclear agenda included both long-term goals, such as the pursuit of deep cuts in, or the eventual elimination of, nuclear arsenals from all countries, and near-term objectives, such as the rapid ratification and implementation of START II, negotiation of START III, extension of the nuclear Non-Proliferation Treaty (NPT), completion and implementation of a Comprehensive Test Ban Treaty (CTBT), and negotiation of a treaty banning the production of fissile material for military purposes.

By decade's end, this diverse community of nuclear activists could justifiably claim a number of significant achievements. In 1994-95, NGOs had lobbied forcefully to help secure the extension of the NPT, then turned their efforts to ensuring the successful negotiation of the Comprehensive Test Ban Treaty. Less tangible, but perhaps equally important, by advocating the adoption of radical goals, NGOs helped to redefine the acceptable parameters of debate about the future of nuclear weapons. Over time, the elimination of nuclear weapons, long considered taboo among “serious” defense analysts, gained legitimacy as a topic of discussion and study. Arms control objectives that fell far short of zero but would have been considered revolutionary only a few years before became government policy.
Yet, despite these achievements, nuclear weapons policies and postures remained largely unchanged. The Clinton administration, like the governments of the other nuclear weapon states, resisted suggestions that the tenets of the nuclear faith that had served them so well during the Cold War might be irrelevant or, worse yet, dangerous in a transformed strategic environment. The heresy of nuclear elimination was rejected and the familiar nuclear theology reaffirmed. Typical of the resistance to change was the Clinton Administration’s 1994 Nuclear Posture Review, which eschewed radical changes in nuclear policy and instead underscored the need to “hedge” against adverse developments in the former Soviet Union. The strategy reviews of France and Britain were equally cautious, while Russia grew more dependent on nuclear weapons and China pursued a sustained, albeit slow-paced, nuclear modernization program. US and Russian leaders remained firmly wedded to the process of formal, painstakingly negotiated constraints on strategic nuclear forces, despite reports that financial constraints would likely force Russia to slash its nuclear forces to fewer than 1000 deployed strategic warheads in 10-15 years and that Russian systems for assuring the safety and security of nuclear weapons and materials were severely strained, creating the risk of catastrophic nuclear accidents or nuclear "leakage" on an unprecedented scale.

The apparent failure of NGOs to persuade governments to adopt a radically new nuclear agenda raises many questions, both about the assumptions and policies promoted by nongovernmental activists, and about the capacity of non-state actors to effect policy changes when the "core" prerogatives of states are concerned—namely, in matters of security and defense. Why have the nuclear weapon states so far failed to adjust their nuclear policies and postures to the new political and strategic environment? Why has little change in nuclear doctrine been achieved? Are proponents of change wrong to argue that global trends are diminishing the utility of nuclear weapons as instruments of foreign and defense policy? Does the fault lie in the absence of presidential leadership, in bureaucratic resistance within governments, or in fissures within or other shortcomings of the NGO campaign? Despite the much-vaunted rise of “new actors” in international politics, does the influence of NGOs remain strictly limited whenever “core” issues of state sovereignty and security are at stake? What lessons should the nongovernmental community draw from the experience of the past decade?

This report explores the origins, evolution, accomplishments and failures of the NGO-led campaign to eliminate nuclear weapons and to advance alternative nuclear “end-states.” It begins with a brief discussion of the global and institutional context of the debate, focusing on
broad trends in the international security environment in the preceding decades and the emergence of nongovernmental organizations as independent players in national and international public policy debates. It then describes the three phases of the 1990s nuclear debates: (i) the US debate on the elimination of nuclear weapons; (ii) the global discussion of the zero option; and (iii) the exploration of alternatives to zero, with emphasis on changes in the operational policies of the nuclear powers. For each phase, it applies the conceptual tools developed by Margaret Keck and Kathryn Sikkink to explain the activities and effectiveness of transnational advocacy networks. It then describes the successes and failures of the NGO nuclear activists and explains the mixed pattern of accomplishments. The report concludes by considering the prospects for future NGO efforts to influence public and governmental perspectives on the value of nuclear weapons in national policies and international politics.

NEW THREATS AND PLAYERS IN INTERNATIONAL SECURITY: PRELUDE TO THE DEBATE

The catalyst for the 1990s debate about the future of nuclear weapons was of course the end of the Cold War and collapse of the Soviet Union. But many of the arguments for change, especially the notion that nuclear weapons might have declining utility as instruments of foreign and security policy, reflected a shift in thinking about the nature of security in response to trends and developments that traditional theories of international relations could not explain and had not predicted. At issue were "realist" assumptions about security threats and the efficacy of military instruments of state policy in general and of nuclear weapons in particular.

The national security establishments of the United States and indeed of most other states tended to reflect the biases and assumptions of "realpolitik." According to this view, international politics was an unending struggle among states over competing aims and interests, in which there was, in the final analysis, no alternative to "self-help"; that is, states had to be prepared to act unilaterally, with military force if necessary, to guarantee their interests and survival. Security, in this view, meant the continued survival of the state. National security policy therefore was the legitimate responsibility of the state alone, and within state structures, of an elite group of the initiated, who best understood the complexities of strategy, military structures, and technology. This was especially true in the realm of nuclear weapons, where policy remained under the tight control of what Janne Nolan has termed the "guardians of the arsenal" – an elite group of national security policymakers.
housed in the Pentagon and National Security Council.²

Even before the fall of the Berlin Wall in November 1989, however, global trends were calling into question this traditional approach to national security. Realpolitik, and the assumptions underlying it, no longer appeared an accurate or complete picture of the strategic realities facing the United States and many other countries.

In the first place, many emerging security threats bore little resemblance to the model of inter-state military conflict that had prompted much theorizing in traditional security studies. Achieving security, many argued, now meant combating a wide range of military and non-military, traditional and non-traditional threats, such as subnational terrorism, intra-state ethnic conflict, the proliferation of weapons of mass destruction (WMD), environmental degradation, transnational crime networks, massive flows of populations across national frontiers, and economic and financial instability. The end of the Cold War only appeared to intensify these trends.

Moreover, others rejected the assumption that the state was the only object worth protecting and securing.³ The growing acceptance of certain universal human rights, as well as repeated abuses of these rights by sovereign governments, prompted some to champion a concept of individual "human security." In this view, the objective of security policy was to protect the rights and survival of individuals, rather than the well being of sovereign states that might or might not extend security to their citizens. Another alternative conception of security – that of "global security" – underscored the joint responsibility of states and individuals, regardless of nationality, to protect the global environment and heritage. In this view, ozone depletion in the earth’s atmosphere, global warming, or environmental pollution on a massive scale would pay little heed to the parochial interests of politically determined territorial units. Both the human and global security perspectives represented significant challenges to the assumption that an international system divided into sovereign states represented a satisfactory solution to the problem of global order and human survival. The "threats that matter," Jessica Mathews summarized, showed "little regard for political boundaries."⁴

New types of threats were also seen to demand new security approaches and tools. Nuclear deterrence or the threat or use of amassed military power could not solve many emerging security threats, proponents of the new security studies argued. Problems that
transcended national frontiers, moreover, eroded the ability of states to act unilaterally and independently to guarantee their security. To surmount these problems, consensus, cooperation, and collaboration were necessary and mutually beneficial. Security in the future would require the creation of new and interlocking international “regimes”—a complex global “cooperative security” system—to address a multiplicity of threats that governments were increasingly powerless to address through independent efforts.5

In the emerging security environment, states would also find themselves acting alongside new players. Global economic integration, the diffusion of advanced communications and information technologies, and the growth in international trade and travel, many argued, were eroding the state's claim to sole representation of a nation's interests and indeed, its ability to deliver the goods that mattered to most citizens. To effectively address the "new" security agenda—environment, population and migration, complex humanitarian crises, and national and international economic and financial instability—businesses, citizens groups, foundations, international and national nongovernmental organizations and individuals were exchanging information, coordinating, and organizing on an unprecedented scale. The trend, Mathews and other posited, was toward a "power shift" from states to NGOs, markets, and international civil society.6

The 1990s debate about alternative nuclear futures, in many ways, represented the clash of the old and new security studies. Proponents of change were, for the most part, nongovernmental organizations and prominent individuals who urged governments to consider the implications of a changing strategic environment for the political and military roles of nuclear weapons. Defenders of the nuclear status quo, in contrast, were government policymakers as well as some nongovernmental groups and individuals who insisted that realist perspectives on international politics were still valid—and that nuclear weapons still mattered greatly both as instruments of war and suasion.

Challenging the nuclear theology, with all of its attendant assumptions regarding the military and political roles of military weapons, the immutability of interstate conflict, and the need to rely on nuclear deterrence in perpetuity, would not prove easy for NGO activists. The prospects for success depended critically on whether the necessary domestic, international, and organizational preconditions for success could be met.
NGO CAMPAIGNS: CHARACTERISTICS AND EFFECTIVENESS

To evaluate the 1990s nuclear debates, it is useful to understand the characteristics, activities, and influence of nongovernmental organizations and advocacy networks, as well as the factors that can hinder or facilitate their success or failure. What distinguishes NGOs from other international “actors”? What are the objectives and activities of NGOs? How do NGOs achieve their preferred outcomes? What are the preconditions for a successful NGO campaign both within countries and internationally? Were these conditions extant in the case of the 1990s debates on alternative nuclear futures?

Despite their great diversity in form and function, nongovernmental organizations share many common characteristics. First they represent unique functional hybrids in that they are "private in their form but public in their purpose." Second, values, principles and ideas typically play a prominent role in their organization, objectives and activities, as does the collection, dissemination and exchange of information. Third, advances in and the diffusion of technology has been critical to the emergence and growth of NGOs as independent and autonomous actors. In particular, information technologies and the increasing availability and affordability of international air travel have made possible the proliferation of contacts at many levels of society and the creation of "new commonalities of identity" clustered around shared values and principles that have little regard for national boundaries. Although their purposes are diverse and relate to a wide variety of issue areas and problems, common objectives include: changing societal norms, improving understanding of a particular issue or problem, setting or influencing public policy agendas or actual policies, assisting with the implementation of policies, and sometimes even solving problems absent governmental actions. In pursuit of these goals, nongovernmental organizations use a plethora of tools and methods, including advocacy; the gathering, analysis and dissemination of information; the propagation of new ideas and recommendations; the monitoring of government actions; the delivery of services; and mediation and facilitation.

Networks are essential to the structure and function of NGOs. Nongovernmental organizations are based upon networks of individuals who share similar goals and interests; networking among these individuals, in turn, is a crucial function of organizations seeking to advance shared agendas. Additionally, many NGOs are integrated into larger, non-hierarchical "issue networks." Information technologies increasingly allow such issue networks to transcend national boundaries, a phenomenon of particular relevance to the 1990s
nuclear futures debate but one that is still only partially understood.¹⁴

The conceptual and analytical model developed by Margaret Keck and Kathryn Sikkink in their study of international advocacy campaigns in human rights, environmental protection and women’s rights may begin to enhance our understanding of such issue networks. When NGOs and individuals begin to coordinate their actions internationally, "transnational action networks" (TANs) may emerge to "reframe" issues in innovative ways such that publics, governments, or decisionmakers are persuaded to embrace a different solution to a particular policy problem. Central to the formation of such networks are "values or principled ideas" that motivate individuals and organizations to "develop explicit, visible ties and mutually recognized roles in pursuit of a common goal." The groups in the network "must also consciously seek to develop a 'common frame of meaning'"—a task complicated by cultural diversity within transnational networks.¹⁵ A defining characteristic of TANs is their ability to use information strategically to "persuade, pressure, and gain leverage over much more powerful organizations and governments."¹⁶ In fully developed campaigns, "core network actors mobilize others and initiate the tasks of structural integration and cultural negotiation among the groups in the network."¹⁷

The goals of transnational action networks, Keck and Sikkink argue, are best viewed as points along a continuum, with the achievement of one objective facilitating fulfillment of other, more ambitious goals. For example, NGOs that are seeking a change in government policy or state behavior may need to begin by first heightening public awareness of a particular issue or by fostering a new understanding of a problem and its appropriate solution. The authors point to several distinct objectives for NGOs engaged in transnational advocacy networks:¹⁸

Issue Creation and Agenda Setting: NGOs often seek to "create" issues by spotlighting problems and the need for new solutions. Issue creation is likely to require reframing an issue as salient and urgent. Crucial to achievement of this objective is creative use of information and analyses to change thinking about the causes, scope, and implications of certain problems, as well as their solutions.

Change in Discursive Practices: As a first step toward achieving changes in
the operational policy or behavior of governments, many NGOs seek first to
provocate a change in the discursive practices of states. Once states have
committed themselves publicly to a specified objective, NGOs can better hold
them accountable for actions and behaviors that are incompatible with
governments’ stated public commitments.

Change in Institutional Procedures: Some NGOs seek to change institutional
procedures of governments or international nongovernmental organizations.
Procedural changes can create new opportunities for outsiders to influence
internal bargaining or shift the mix of institutional players in the decisionmaking
process in a way that advances NGO objectives.

Change in Policy: Changes in discursive practice over time may lead to changes
in governmental operational policies to bring state actions into line with declared
governmental objectives or commitments.

Change in State Behavior: The ultimate goal of many NGO activities, beyond
declarations of intention or new policy guidelines, is change in the actual behavior
or actions of states.19

Several factors help to determine whether NGOs are able only to temporarily propel
an issue onto the public agenda or whether an actual change in policy results, including the
nature of the issue, characteristics of the target audiences, and features of the participating
NGOs and NGO networks. First, the production, use, exchange, and distribution of
information in fulfillment of the network's mission may be complicated by the very nature of
the issue being addressed. If an issue is perceived to be largely technical in nature, it may be
difficult for a transnational campaign to mobilize broad constituencies. Moreover, political
debate over whose information and analysis is more credible and persuasive may be more
hotly contested if a problem is characterized by great uncertainty and therefore open to
different interpretations. In addition, structural problems—those perceived to be caused by
factors other than human agency—pose special challenges for an NGO campaign. If
problems cannot be traced to "the deliberate (intentional) actions of identifiable individuals,"
then they will be less amenable to advocacy network strategies.20 Finally, issues that have a
human face, especially those involving injury to the powerless and vulnerable, are more likely
to resonate with publics. Citizens are also more likely to be moved by testimonials that make
real the need for action. Second, the relative receptivity or vulnerability of target audiences to external pressures may also enhance or undermine the effectiveness of NGO campaigns. Personal interests and proclivities, as well as political calculations of government leaders or officials may create a fertile or fallow field for NGOs seeking to effect change in a particular issue area. For example, a leader who perceives him/herself to be in a strong political position or takes a strong interest in the target issue may feel emboldened to undertake new initiatives; a diffident or indifferent leader, in contrast, may be unable to challenge institutional orthodoxy or prefer to focus on problems for which the chances of successful resolution—and thus political gain—appear greater. Additionally, the vulnerability of target audiences varies with the access and leverage available to NGOs. For example, a strategy aimed at creating elite coalitions between nongovernmental and governmental experts may work only if there are already divisions within the executive or legislative branches and these divisions can be used to political advantage by outsiders. Finally, the capabilities and resources of NGOs themselves may also be critical in determining the chances for success. Specifically, dense networks of NGOs that are bound by reliable information flows and strong connections are more likely to be effective in achieving their objectives.

Although concentrated on other issue areas, Keck and Sikkink's study of advocacy networks offers valuable conceptual and analytical tools to better understand the operation and objectives and relative effectiveness of the NGO campaign to advance an alternative nuclear agenda. First, the authors' focus on NGO advocacy networks captures the international scope and interactive nature of the nuclear futures campaign more effectively than the general literature on NGO activities. Although the network that coalesced around the nuclear issue was perhaps more loosely organized and less developed than the TANs examined in Keck and Sikkink's study, the nuclear campaign nevertheless would appear to exhibit many of the basic characteristics described by the authors, namely a central commitment to values or principled ideas, the creative use of information, the use of sophisticated political strategies, and "voluntary, reciprocal and horizontal patterns of communication and exchange." Second, the attention to intermediate as well as ultimate objectives and identification of factors influencing the effectiveness of TANs should allow for a more nuanced evaluation of NGO successes and failures.
This report applies the conceptual tools developed by Keck and Sikkink to describe, evaluate and explain the NGO campaign for an alternative nuclear future. It undertakes two modifications to the model. First, it will consider an important NGO objective implicit but not specified in Keck and Sikkink's scheme, namely a change in societal or international norms, in this case, norms against the use and acquisition of nuclear weapons. Second, the study will consider the influence of a fourth factor—the international strategic environment—on the relative success or failure of a transnational advocacy network, in order to better capture the potential interaction between relevant international events and perceptions of the "issue," target vulnerabilities, and actor characteristics. In the case of the 1990s nuclear debates, the evolution of the international environment was probably critical to the successful reframing of the nuclear issue. If current events appear to reinforce benign trends in international security, then arguments about the feasibility and desirability of phased nuclear elimination would appear more credible; if, on the contrary, the international security environment appeared to be growing more threatening, then arguments to sustain Cold War nuclear theology could be more persuasive—even if nuclear weapons in fact were likely to be of little value in countering specific threats.

Overview of the NGO Debate on Alternative Nuclear Futures.

Although nongovernmental organizations had participated in earlier anti-nuclear campaigns, the 1990s debate on nuclear futures was qualitatively different from earlier protest movements such as the nuclear freeze movement or protests against deployment of intermediate-range nuclear forces (INF) in Europe in the 1980s. First, in contrast to earlier campaigns, the 1990s nuclear debates were spearheaded by US defense and security experts who cared less about mobilizing mass publics than about persuading those who mattered when it came to the arcane world of nuclear policy and doctrine, namely other members of the US strategic community, both in and outside of government. The nuclear debates, in short, began as a revolution from within. Among the "revolutionaries" were many who had long been part of the broader US strategic community and its culture, but who had come to hold different views on the roles and utility of nuclear weapons. Over time, the pro-reform experts were joined by advocacy and citizen-action groups that appealed to, and were rooted in, broader constituencies. The growing multiplicity of actors led to some diversification of activities and efforts, but the campaign to effect change in nuclear policies and doctrines
never fully lost its elite character; despite some efforts by citizen action groups to engage public interest, the debate about nuclear futures occurred primarily within and among communities of defense experts. Second, the 1990s debates on nuclear policy were characterized by unusual breadth, depth, and complexity. Proponents and opponents of radical changes in US nuclear policy debated the nature and direction of changes in the global political system, explored the opportunities and limits of new technologies to verify compliance with constraints on nuclear arms, and considered alternative paths toward the eventual elimination of all nuclear weapons in light of current and prospective regional and global political conditions. Third, although discussion of nuclear weapons issues initially was concentrated in the United States, communications technologies created a loosely structured community of groups and individuals committed to advancing alternative nuclear agendas in many locations around the globe.26

The debate on alternative nuclear futures can be divided roughly into three phases, each of which is described in greater detail below. During the first phase (approximately 1992-95), NGOs and private individuals, primarily but not exclusively in the United States, began to question the traditional assumptions that had guided nuclear policy during the Cold War. By mid-decade, US policy research institutions had produced a steady stream of studies and reports arguing the feasibility and desirability of nuclear disarmament, while prominent retired US military commanders, former defense officials, and grass-roots advocacy groups tried to rouse public interest in old and new nuclear dangers. As the zero objective gained legitimacy in the United States, the debate about alternative nuclear futures was spreading to other countries (phase II, 1995-96), spurred by the Canberra Commission report on nuclear elimination and the public endorsement in December 1996 of the elimination objective by 61 retired military commanders from 17 countries. During phase III (1996-present), souring East-West relations and resurgent proliferation challenges created fissures among NGO activists and shifted the emphasis of their efforts to near-term goals that appeared more feasible—and therefore more credible—in a deteriorating security environment. As of this writing (April 1999) growing concern about proliferation, a prolonged stalemate in the US-Russian arms control dialogue, and US-Russian differences over NATO expansion, national missile defenses and the conflict with Yugoslavia over Kosovo appear to have brought the
campaign for a new nuclear agenda to a standstill. While many NGOs remain committed to a new approach to nuclear risk reduction, programming in the United States directed toward this end has little resonance either with the administration or Congress.

A chronological approach is used to review the nuclear futures debate for several reasons. First, several excellent analyses of the case for and against nuclear disarmament and other nuclear endstates already exist. This report is not intended to duplicate those efforts, nor to catalogue exhaustively or evaluate the merits of, the various proposals tabled over the last ten years. Rather, the purpose of this paper is twofold. First it seeks to chronicle and enhance our understanding of how and why the debate on nuclear futures evolved as it did. Second, it seeks to determine and explain both what civil society actors accomplished and what they did not achieve. Answering both of these questions requires knowledge of how NGO objectives, strategies and tools evolved over time in response to changes in the international threat environment, in the domestic political context of the most influential states, and in the network itself. The arguments both for and against nuclear disarmament and other endstates are of interest primarily for what they reveal about NGOs ability to "reframe" the nuclear issue in new ways and the need to alter the message as political, strategic, or tactical considerations dictated.

**PHASE I—THE US DEBATE ON NUCLEAR ELIMINATION**

In the early 1990s, a small number of European NGOs began to consider the implications of the end of the Cold War for the balance of risks and benefits associated with nuclear weapons. These early studies introduced the issues that would be the focus of intensive debate throughout the decade:

**Implications of Changes in the International System:** What is the nature and direction of change in the international political system? Under current and prospective international conditions, is security without nuclear weapons possible at acceptable risk? What kinds of political, technological or other changes would be necessary before nuclear weapons could be reduced and/or eliminated? Are these changes likely to occur?

**Value and Risks of Nuclear Weapons:** What political and military roles or purposes do nuclear weapons have, given one's assumptions about the current and prospective
international system? Are the roles of nuclear weapons increasing, decreasing, or unchanging? What risks do current nuclear policies, doctrines and postures entail? Conversely, what risks would steps to reduce or even eliminate nuclear weapons entail?

**Proliferation and Nuclear Policy:** What drives countries to develop or acquire nuclear weapons? How, if at all, might a change in US policy or the policies of the other nuclear weapon states affect the calculations of would-be proliferators or the vitality and longevity of the nonproliferation regime? Specifically, would a US policy aimed at eventually eliminating nuclear weapons discourage or encourage proliferation—or both?

**Incrementalism or Ultimate Objectives:** Assuming that a change in the approach to nuclear weapons is desirable, should the focus be on achieving incremental gains that address the most immediate dangers or on steering a course toward a specified endstate, such as the complete elimination of all nuclear weapons? Is it necessary and desirable—or counterproductive—to define the ultimate objective?

The international climate at this time was highly conducive to a debate about such fundamental questions. US-Russian relations were improving steadily, leading in turn to arms control successes that would have been unthinkable only a few years before. In 1991, after years of delay, the START I accord was finally completed. In the same year, Presidents Bush and Gorbachev agreed to parallel reciprocal measures to drastically reduce the numbers of deployed tactical nuclear weapons. After decades of inertia, a treaty to reduce conventional force levels in Europe was finally ratified in 1992. Developments in other parts of the world also appeared to signal a shift toward de-emphasis on nuclear weapons. In 1991, South Africa joined the NPT, followed by France one year later, while Argentina and Brazil implemented a bilateral agreement to verify dismantlement of their respective nuclear programs. By 1994, agreements to de-nuclearize Belarus, Kazakhstan, and Ukraine had been negotiated, and all three states had acceded to the NPT. In March of the same year, the United States, Russia, and Great Britain announced that they were de-targeting their nuclear missiles; Russia and China followed suit in September. Although largely a symbolic gesture, the de-targeting decisions seemed yet another sign that the threat of mass destruction might be losing political and military value in the emerging global strategic environment.
Nuclear Apostasy: Questioning the Assumptions of the Past.

Thinking about new approaches to nuclear weapons began to percolate first in Europe, where the end of the Cold War had been felt most tangibly and dramatically. Convinced that the goal of complete nuclear disarmament merited closer study, the Pugwash Conferences on Science and World Affairs, which had long served as an important venue for international dialogue between Western and Soviet scientists on important global security issues, decided in 1990 to initiate a study of the desirability and feasibility of creating a nuclear-weapon-free world. Three years later, Pugwash published *A Nuclear-Weapon-Free World*, which described the essential components of an accord to eliminate nuclear weapons and the problems associated with achieving this goal. Also noteworthy from this early period was a two-volume study by the Stockholm International Peace Research Institute (SIPRI) on the achievement of national and international security in a world both with and without nuclear weapons. These studies were the first signs of a new willingness to reconsider an objective that had long been taboo to the “serious” community of defense experts: the complete elimination of nuclear weapons.

Interest in new approaches to nuclear weapons was also starting to stir in the United States. The end of the Cold War, a number of US defense experts reasoned, made possible a fundamentally different kind of political relationship with Russia, in which nuclear deterrence and mutual assured destruction would no longer play a central role. The sense of new opportunities was matched by growing concern about new nuclear dangers. The five-year review conferences for the NPT had been growing increasingly contentious, and many observers predicted a tough battle to secure the indefinite extension of the pact at a 1995 conference that would decide the accord’s future. With the end of the Cold War, some feared, many states might be less willing to accept in perpetuity the political inequity of a world of only five sanctioned nuclear powers.

One of the first US defense experts to broach the issue was Congressman Les Aspin, then Chairman of the House Armed Services Committee. In January 1992, Aspin asked many of Washington’s most respected security analysts to consider a radical idea: that the balance of risks and benefits associated with reliance on nuclear weapons had changed dramatically after the end of the Cold War and in light of the rising threat of nuclear proliferation. Rather than providing the United States an edge, Aspin posited, nuclear weapons could effectively “neutralize” US conventional superiority. The Congressman
asserted: “If we now had the opportunity to ban all nuclear weapons, we would.” His provocative essay, From Deterrence to Denuking: A New Nuclear Policy for the 1990’s, was distributed to over one hundred nongovernmental experts and members of Congress for their comments and critique.

Aspin was not the only one questioning the assumptions that had guided US nuclear policy for over four decades. The 1991 report of the Committee on International Security and Arms Control (CISAC) of the National Academy of Sciences recommended reductions in the US and then Soviet nuclear arsenals to the level of 1,000 to 2,000 warheads each and declared that nuclear weapons “should serve no purpose beyond the deterrence of, and possible response to, nuclear attack by others.” Reductions to even lower levels—roughly 100 to 200 warheads each for the United States and Russia—were proposed by Robert McNamara, Secretary of Defense from 1961 to 1968. The June 1993 report of the Nuclear Strategy Group of the Washington-based Center for Strategic and International Studies echoed the need for a reexamination of existing policy and doctrine: “Given the profound changes in international politics over the last several years, U.S. nuclear strategy clearly needs rethinking.” The group outlined a program of phased cuts in force levels that could, under certain political conditions, culminate in the creation of an international nuclear deterrent force, non-operative nuclear forces (“virtual” nuclear arsenals), or complete and total disarmament. Two months later, General Andrew J. Goodpaster, former Supreme Allied Commander in Europe and then co-chair of the Atlantic Council, outlined a step-by-step program intended to progressively reduce, and perhaps someday eliminate, nuclear weapons. The plan envisioned additional bilateral reductions, followed by a multilateral agreement among the five declared nuclear weapon states to reduce arsenals to 100 to 200 warheads each, and then, perhaps, an agreement to eliminate nuclear weapons worldwide. Even Paul Nitze, special advisor to President Reagan on Arms Control from 1981 to 1984 and author of NSC-68, argued that the utility of nuclear weapons had diminished and proposed that the United States convert its strategic deterrent from nuclear weapons to “smart” conventional weapons.

These efforts to encourage a reexamination of past assumptions and policy appeared to bear fruit in October 1993, when the Clinton administration announced that it would begin the first fundamental review of US nuclear policy in fifteen years. Les Aspin, who in the interim had been appointed US Secretary of Defense, promised a “comprehensive approach,” as “demanded by new circumstances,” in particular, the possibility of nuclear leakage from
the former Soviet Union and the growing risks of nuclear proliferation and terrorism. The Nuclear Posture Review was undertaken under the leadership of the Office of the Secretary of Defense, with the participation of the Joint Staff, all of the services, and the various commands. Other parts of the executive branch—in particular, the State Department—were excluded from the review.

Reframing Zero.

Paradoxically, new impetus for the nuclear debate would come from the NGOs’ first failed effort to influence US policy. Despite the urgings of Washington-based advocacy organizations and think-tanks, by June 1994 it was evident that the Clinton administration’s Nuclear Posture Review would recommend no significant changes in US nuclear policy and posture. Instead, the review, released in September, emphasized the need to “hedge” against a reversal of the reform process in Russia and the reemergence of a Russian threat and called for minor adjustments in US strategic nuclear forces after START II. One US weekly summed up the results of the review: “Cold-war-era nuclear strategy is here to stay.”

The results of the Nuclear Posture Review fueled a sense of frustration in the NGO community that the Clinton administration was missing a unique opportunity to put US-Russian relations on a different footing and to progressively reduce the dangers associated with Cold War nuclear postures. Over the next several years, defense experts and numerous nongovernmental organizations—think-tanks, policy advocacy organizations, grass roots groups, and foundations—would launch or support some 30 independent efforts intended to promote a new nuclear agenda (see table 1). Prominent among these studies were those completed by the National Academy of Sciences, the Atlantic Council, the Henry L. Stimson Center, and the Princeton Deep Cuts Study Group (see appendix 1). Over time, many other organizations contributed significantly to the debate, including the Council for a Liveable World, Federation of American Scientists, Lawyers Alliance for World Security, Natural Resources Defense Council, and Union of Concerned Scientists.
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<td>Brookings Institution Bruce Blair Participant in Deep Cuts project; independent research Decreasing alert status of nuclear forces in US and other NWS Articles Book (1995)</td>
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*Cathleen S. Fisher*
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**PROJECTS BASED OUTSIDE OF US (select)**

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For advocates of deeper reductions or the eventual elimination of nuclear weapons, the sweeping changes in the global strategic environment since 1989 and the growing risk of proliferation offered both reason and opportunity to reassess the fundamental beliefs and principles that had guided US policy in the past. Even if nuclear weapons had helped to maintain peace and stability during the Cold War, many argued, the critical question was whether they would perform similarly beneficial roles in other regional or global contexts. Moreover, many argued, Cold War nuclear policies and postures could entail growing risk of accidental or inadvertent nuclear use. Bruce Blair and others, for example, pointed to the continuing high state of alert of US and Russian forces and the deteriorating state of Russian command and control systems. In the new strategic environment, many concluded, the political and military utility of nuclear weapons to the United States had narrowed to what the second CISAC study, *The Future of U.S. Nuclear Weapons Policy*, termed the "core function of deterring nuclear attacks, or coercion by threat of nuclear attack, against the United States or its allies."45

If the only role of nuclear weapons were to deter other nuclear threats, some experts reasoned, then if all states were to eliminate their weapons, there would no longer be a need for them. The goal of US policy, some proponents of change argued, should therefore be to pursue the elimination of all nuclear weapons, not unilaterally, but through a gradual, verifiable, step-by-step process that would allow American leaders to assess at each juncture the relative risks and benefits of further measures toward complete elimination. A nuclear-weapon-free world, they acknowledged, might never be achieved and, if so, only over a considerable period of time and if effective solutions could be found to the problems of verifying and enforcing such a ban. Nevertheless, proponents of elimination argued, a serious US commitment to the goal of ultimately eliminating all nuclear weapons would have substantial security benefits. Topping the list of potential advantages was strengthened support for the nonproliferation regime.46

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<td>Verification, compliance, intrusiveness, implementation, sustainability of zero</td>
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Programs for phased elimination contained many common elements. There was broad consensus that in the near term reductions in US and Russian nuclear arsenals to roughly 1,000 to 2,000 warheads each were both possible and desirable. Such quantitative restrictions, many emphasized, should be supplemented with measures to reduce the risks of accident, theft, or unauthorized use of nuclear weapons. In many reports, additional bilateral reductions would be followed by a multilateral agreement among all five declared nuclear weapon states, perhaps with provisions to address the capabilities of the “threshold” nuclear weapon states (India, Pakistan, and Israel) as well. Views differed on steps beyond reductions below several hundreds of weapons. Terming the "abolition" or "elimination" of nuclear weapons infeasible, the National Academy’s second report, for example, advocated "a durable prohibition" of nuclear weapons, contingent upon the creation of the necessary preconditions. Other studies advocated an interim period of “denationalization” or “neutralization” of all countries’ nuclear forces, during which both the feasibility and the desirability of their complete elimination would be assessed.

In contrast to many earlier proposals, the new advocates of nuclear disarmament were not proposing immediate or unilateral disarmament. Rather, progress toward the final objective would be keyed to changes in the broader strategic environment. Virtually all studies pointed to the need for more effective verification regimes and global response capabilities to enforce a ban on nuclear weapons. Although world government was generally not viewed as a necessary prerequisite to the complete elimination of nuclear weapons, most supporters of the zero objective acknowledged that the perceived link between international prestige and the possession of nuclear weapons would have to be broken and effective and durable security alternatives to reliance on nuclear weapons created. For complete elimination to be possible, governments would have to “see so little value in the threat of mass destruction that nuclear weapons and nuclear deterrence would wither away.”

Although many policy research organizations presented well-argued rationales for nuclear elimination, perhaps the most compelling presentation of the argument for zero was to come from senior retired US military commanders, who could offer first-hand testimonials of experiences that had led them to question the military utility of nuclear weapons and to
appreciate the grave risks posed by these weapons. For example, the Stimson Center’s program for phased nuclear elimination was endorsed by four senior retired military commanders, while the National Academy of Science’s second nuclear study was chaired by Maj. General William Burns, the Joint Chiefs’ representative to the INF negotiations from 1981 to 1988 and Special Envoy to Russia for Nuclear Dismantlement from 1992 to 1993. General Andrew J. Goodpaster, who had directed the Atlantic Council’s project on "Further Reins on Nuclear Arms" and who later chaired the Stimson Center’s Steering Committee, in 1995 launched a private initiative to secure public endorsement of the zero objective by other senior retired military figures. On December 4, 1996, Goodpaster and General George Lee Butler, who had headed the US Strategic Command (STRATCOM) from 1991 to 1994, urged the nuclear weapon states to join in “reducing their nuclear arsenals step by step to the lowest verifiable levels consistent with stable security, as rapidly as world conditions permit,” and to reduce the alert status of their weapons. The “ultimate objective of phased reductions,” the generals declared, “should be the complete elimination of nuclear weapons from all nations.”

Butler would become one of the most visible, articulate, and forceful advocates of phased nuclear disarmament. After considerable reflection and much deliberation, Butler made his first public statement in support of eventual nuclear elimination on October 3, 1996, before the audience of the annual State of the World Forum, held in San Francisco, California. Noting his "growing alarm" and "deepening dismay" at the events shaping nuclear roles in the post-Cold War period and recounting his command experiences, Butler declared his "deeply held conviction that a world free of the threat of nuclear weapons is necessarily a world devoid of nuclear weapons." Nuclear weapons, Butler averred, "have no defensible role.” Further, any purported military utility, he asserted, was transcended by "the political and human consequences of their employment." He called on the nuclear weapons states "to accept that the Cold War is in fact over, to break free of the attitudes, habits and practices that perpetuate enormous inventories, forces on standing alert and targeting plans encompassing thousands of aimpoints.” He challenged the US government to undertake the kind of sweeping and fundamental review that it had failed to conduct in 1993. Citing the work of the Canberra Commission and the Stimson Center,
Butler urged governments to undertake the "practical and realistic steps" outlined in these studies to move the world toward the ultimate objective of eliminating all nuclear weapons. It was a message that Butler was to repeat several months later in Washington and subsequently on repeated occasions and before varied audiences around the country. Over time, Butler was to grow ever more critical of US policy and the adherence to Cold War mindsets and postures that he saw as both outdated and dangerous. His criticism of US policy in the end would extend to the United States' very reliance on nuclear deterrence for its security.

The public testimonials of retired military commanders lent new credibility to NGO-led efforts to persuade US policymakers to adopt a new nuclear agenda. They also sparked a flurry of editorials and commentaries in newspapers around the country, for the first time extending debate—albeit briefly—about nuclear weapons issues beyond the confines of Washington strategic policy circles. One commentary endorsed Butler's message and warned that "we are in danger of squandering the benefits reaped from the end of the Cold War unless we, as a nation and as part of the human race, make some lasting decisions quickly." Echoing Butler's plea, it called for a fundamental review of nuclear policies and strategies, followed by international negotiations to work out the timetable and verification mechanisms to eliminate all nuclear weapons. In a similar vein, another columnist lauded the Butler/Goodpaster statement and underscored the need to exploit "an opportunity to eliminate these (nuclear) weapons," which, he commented, "are inherently useless."

But not all viewed the generals' public pronouncements with favor. Dubbing Butler's conversion a "non-bombshell," one Washington Post columnist excoriated Butler for not "expressing shame or repentance for his major role in nuclearism" and for failing to criticize US policy while still on active duty. A New York Times editorial welcomed the attention the generals’ statement had drawn to the United States’ “unfinished business with Russia,” but fell short of endorsing the call for nuclear elimination.

Complementing the efforts of prominent individuals and various think-tanks were the activities of more traditional advocacy organizations, many of them based in Washington, DC. As 1995 drew near, these groups focused their energies on securing two important nonproliferation victories: the indefinite extension of the Nuclear Nonproliferation Treaty and the successful negotiation of a Comprehensive Test Ban Treaty. In December 1993, nineteen American and European NGOs formally banded together in a joint effort christened the
Campaign for the Nuclear Nonproliferation Treaty. Over the course of the next eighteen months, the Campaign, which was housed at the Stimson Center, hosted meetings and seminars in Washington and New York, met privately with US and foreign government officials, and issued policy briefs designed to draw attention to the extension conference and the NPT’s vital role in nonproliferation efforts. Campaign representatives attended the third and fourth PrepCom meetings for the conference, as well as the 1995 extension conference in New York, along with over fifty nongovernmental organizations from the United States and other countries, many with similar objectives. Following the extension of the NPT in April 1995, attention turned to negotiations for a Comprehensive Test Ban Treaty. Completion of a CTBT by fall 1996 was one of the specific “benchmarks” identified in the "Principles and Objectives" approved at the time of the NPT's extension, which henceforth were to be used by states parties to the NPT to measure progress toward fulfillment of the treaty’s objectives. Throughout 1995 and 1996, US organizations worked hard to persuade political leaders in the United States and other pivotal countries to bring the negotiations to a successful conclusion. Both the campaign to extend the NPT and the one to secure a CTBT were fought with many traditional NGO tools—conferences, press briefings, letter writing campaigns, polling—as well as new ones, including "faxblasted" policy and press advisories, the distribution of information on events through email lists, and websites containing information on disarmament and the activities and stances of particular organizations.

In addition, many smaller, grass-roots organizations banded together in 1995 to champion the broad goal of global nuclear disarmament. In contrast to the primary initiators of the new nuclear debate, these later entrants were, for the most part, long-time supporters of the abolition of nuclear weapons. For example, the NGO Committee on Disarmament, a loose coalition of hundreds of citizens groups around the world, had organized conferences, published articles on nuclear disarmament, and liaised with the United Nations on disarmament issues for over twenty years. Capitalizing on the growing elite interest in nuclear disarmament, the Committee, in cooperation with the UN Centre for Disarmament Affairs and the UN Department of Public Information, invited representatives from policy research institutions to present the case for zero at its "Disarmament Week Symposium," an annual event timed to coincide with the General Assembly's discussions of disarmament issues. Another large-scale grass-roots effort to emerge from the NPT fervor was "Abolition 2000," a loosely organized coalition of some 1,200 citizen-action groups in over eighty countries,
which called for completion of an international convention by 2000 to eliminate nuclear weapons within a timebound framework.\textsuperscript{63}

\textbf{Nuclear Counter-reformation.}

Not everyone was prepared to endorse a new nuclear agenda, however. As the number of reports and commentaries favoring radical changes in US nuclear policy multiplied, critics of the elimination agenda mounted a counteroffensive. The common intent of the counter-reformers was to reclaim control over the nuclear futures debate. Participating in the effort were representatives of several conservative think-tanks and advocacy organizations, former and current civilian defense officials and military commanders, and representatives of the national nuclear weapons laboratories.\textsuperscript{64} Keith Payne of the National Institute for Public Policy concluded that “the case for nuclear abolition suffers from internal logical contradictions and if implemented as policy would likely lead to catastrophe.”\textsuperscript{65} Asserting the unchanging utility of nuclear weapons, Payne dismissed the new proposals for nuclear elimination as little changed from the Cold War and claimed that the current advocates of changes had always been in the “abolitionist” camp, thus ignoring important differences between earlier grass-movements and the 1990s debate.\textsuperscript{66} Discrediting the message sometimes meant discrediting the messenger, however. Frank Gaffney, head of the Center for Security Policy, declared: “The proposal for de-nuclearizing the world . . . suggests even to supporters of the military that disarmament is too serious to be left to the generals—at least to these generals.”\textsuperscript{67}

The root of their criticism was a very different set of assumptions about both current and projected world conditions. Although the Cold War had ended, the counter-reformers reasoned, the past was prologue when it came to the threats facing the United States and the role of nuclear weapons in countering those threats. Contrary to the "utopian" visions painted by disarmament advocates, the world was not evolving in ways that would ever make elimination of all nuclear weapons possible, they asserted. To create a world free of nuclear weapons, all major powers would have to act cooperatively in reducing and destroying their arsenals; but anarchy and conflict, not cooperation, were the enduring conditions of international politics. As one former Bush administration official remarked, “The day that all
the great powers are prepared to do this together is the day the history of international relations as we have known it for three and a half centuries will have ended.” Ed Rowny, a senior arms control negotiator under President Ronald Reagan, commented: “The end of the Cold War does not mark the end of history.” On the contrary, observed Air Force General Eugene Habiger, commander-in-chief of STRATCOM from 1996 to 1998: “It’s likely that future international relationships will be characterized by conflict” and that “deterrence will continue to be an indispensable element of national strategy to ensure that conflict does not take its most violent, destructive forms.” Gaffney warned that the world would remain a dangerous place, and “the idea of completely eliminating nuclear weapons . . . utopian nonsense.” Others acknowledged that globalization and interdependence had eroded some measure of state control, “but this hardly indicates the fundamental change in international politics” that proponents of change suggested. Payne warned: “Events over the past several years must leave us cautious about the degree to which a truly cooperative international community and an international set of norms will replace more particular communities and sets of norms.” A common—and politically compelling—tendency of many counter-reformers was to juxtapose the long-term measures proposed for the elimination of nuclear weapons against current political conditions, ignoring the fact that many disarmament proponents had explicitly recognized and cautioned that nuclear elimination would only be possible if political relations among states evolved in such a way that nuclear weapons lost their political and military value as instruments of statecraft.

The counter-reformers also rejected the thesis of declining utility and countered that nuclear weapons remained vital to US national security in a variety of roles: to moderate rivalry among the great powers and maintain regional and international stability; to deter and respond to both conventional and unconventional threats; and to prevent the proliferation of weapons of mass destruction. The function of nuclear weapons, Habiger asserted, “is not solely to deter nuclear use by others but to restrain war itself.” The Soviet Union may have disappeared, but Russia’s future course was uncertain and the crumbling superpower had become more, rather than less, dependent on nuclear weapons. The most adamant opponents of change indeed argued that the United States had already gone too far in reducing its nuclear forces, and pointed to asymmetries in the
sizes of the US and Russian nuclear infrastructures, which would give Moscow sizeable break-out potential. In addition, new threats were emerging to threaten US national security interests. High on the list of potential new threats was China. General Habiger commented: “China’s a comer. . . . I’m not saying that China is by definition going to be a threat to us but when you’re not building any more new weapons . . . you need to think to beyond the next step.” Moreover, the proliferation of chemical and biological weapons—both of which the United States had pledged not to use—also made it essential for the US to retain the threat of nuclear use in response to a threat or use of CBW. Robert Joseph and John Reichart argued that it was essential that the US retain the option to respond to CBW use in a regional conflict with nuclear weapons: “If we rule out these options, we undercut deterrence and raise the likelihood of conflict occurring, as well as the likelihood that chemical and biological weapons will be used against us.” Nuclear weapons, in this view, were unique; “conventional forces cannot replace nuclear weapons operationally or for deterrence purposes.” A study by the Center for Counterproliferation Research at the National Defense University and the Center for Global Security Research at Lawrence Livermore Laboratory reiterated the need to rely on nuclear weapons in a broad variety of political and military roles. Termed a "fresh, long-term look" at US nuclear policy in the 21st century, the report concluded that "nuclear weapons will continue indefinitely to play an indispensable role as a hedge against uncertainties, to deter potential aggressors who are both more diverse and less predictable than in the past, and to allow the United States to construct a more stable security environment."

Further, while supporters of the ultimate elimination of nuclear weapons argued that a serious commitment to progressive de-nuclearization was vital to curb the spread of WMD, the counter-reformers responded that a pledge to pursue disarmament in fact would encourage—not discourage—proliferation. The US possession of nuclear weapons, many argued, had little effect on foreign leaders’ motivations or decisions either to acquire or forego a nuclear capability. Moreover, if the United State were to seriously pursue the complete elimination of all nuclear weapons, important non-nuclear allies—especially Germany, Japan, and South Korea—would feel more insecure, and might reevaluate the relative costs and benefits of their non-nuclear status. Payne declared: “The existence of U.S. nuclear weapons itself almost certainly has little to do with creating incentives for proliferation by ‘legitimizing’ nuclear weapons. Indeed . . . to some extent the contrary is true: confidence in the American security guarantee . . . is a critical element in reassuring U.S. allies that they do not need to go nuclear themselves.” Or as Under Secretary of Defense for Policy Walter B. Slocombe...
commented in testimony before the US Senate, “Our nuclear capabilities are more likely to
give pause to potential rogue proliferants than encourage them.”  

Many opponents to change also tended to dismiss the risks associated with Cold War
operational policies. Some countered that General Butler and others were overstating the risk
of nuclear accidents and incidents and pointed with pride to the United States’ success at
preventing accidental detonations for over four decades and to more recent measures, such
as the removal of non-strategic nuclear weapons from US surface ships and stand-down of
strategic bombers, as evidence that these risks had actually decreased. Others pointed out
that a change in the US nuclear posture—for example a reduction in launch readiness or alert
rates—did not guarantee that the Russians would undertake similar steps. The two postures,
many concluded, were disconnected and reciprocity could not be assumed.

Even if a ban on nuclear weapons were in the United States’ interest—which
counter-reformers flatly rejected—verification and enforcement of nuclear disarmament was
impossible, many contended. In testimony before the US Senate, former Reagan
administration official Richard Perle stated emphatically: “There is no way to verify
compliance with a treaty banning all nuclear weapons. Not now. Not tomorrow. Not ever.”
Assertions of the verifiability of nuclear elimination, in this view, were based on overly
optimistic expectations of technological breakthroughs and naive assumptions about the future
degree of transparency, trust and cooperation among states.

Not all critics of the elimination objective argued for maintenance of high force levels
or opposed any change in existing practices, however. While some counter-reformers argued
adamantly for retention of robust and sizeable nuclear forces, others agreed that current and
prospective nuclear roles could be met at levels short of Cold War highs. Terming the goal of
eliminating all nuclear weapons “foolish,” Richard Perle nevertheless acknowledged: “I think
we have too many nuclear weapons and I think we should get rid of . . . a significant number
of the ones we have now.” Another observer noted: “You do not have to be an abolitionist
to favor making the arsenal—ours and Russia’s—even smaller, safer and less salient in
national security strategy than current plans anticipate.” Some operational measures
designed to address increasing concerns about the safety and security of nuclear weapons
and materials in the former Soviet Union were accepted, for example, since such measures
reduced threats to the United States and could be decoupled from US actions.
Governmental Action and Inaction.

The most powerful resistor of radical change was the US government. Responding to the chorus of calls for nuclear elimination, then Secretary of Defense William Perry expressed his support for “very deep and very fast reductions,” but continued, “I do not believe in unilaterally eliminating our nuclear weapons. You cannot uninvent the nuclear bomb. . . .”

The Clinton administration defended its arms control record and reaffirmed that “nuclear deterrence will remain a cornerstone of our strategy in protecting America’s vital national interests.”

A major part of the problem was the president's domestic focus and unwillingness to challenge Pentagon orthodoxy regarding nuclear weapons, as well as the lack of powerful champions for nuclear arms control at the senior level of government. Control over policy consequently was left in the hands of key executive branch officials, some of whom were holdovers from the Bush and Reagan administrations. Even when outsiders were recruited to government positions, they often became resistant to change once installed in executive bureaucracies—much to the dismay of their former colleagues in the nongovernmental community. To the degree that it focused on the nuclear issue at all, the first Clinton administration directed its efforts toward addressing three formidable near-term challenges: (i) the nuclear problems created by the Soviet Union's dissolution; (ii) the need to bring to conclusion important arms control endeavors tabled by the previous administration, including START II and the Chemical Weapons Convention (CWC); and (iii) the campaign to secure an indefinite and unconditional extension of the NPT and to conclude a Comprehensive Test Ban Treaty.

The end of the Cold War may have diminished some of the risks associated with the superpower nuclear competition, but it had also created new nuclear dangers. The dissolution of the Soviet Union in December 1991 left four independent states with nuclear weapons on their soil. While Russia had pledged to honor the Soviet START I obligations, the disposition of nuclear forces in Belarus, Kazakstan, and Ukraine was less certain. Through a complex series of bilateral and multilateral
negotiations and pledges of technical and financial assistance and security assurances, first the Bush, then the Clinton administration sought to secure the commitment of the successor republics to renounce their nuclear inheritance, a goal that was largely accomplished by 1994.\textsuperscript{89} Other administration initiatives were designed to assist a faltering Russia with the safe dismantlement of systems affected by the START accords and with secure transport and disposal of nuclear materials. The Cooperative Threat Reduction (CTR) program, a Congressional initiative of former Senator Sam Nunn and Senator Richard Lugar, became a cornerstone of the administration's efforts in this regard.

Other top arms control priorities were the START process and ratification of the 1993 Chemical Weapons Convention. To give new impetus to bilateral arms control cooperation, Presidents Clinton and Yeltsin in January 1994 agreed to "de-target" Russian and American strategic nuclear forces; later that year, the two presidents announced that the United States and Russia would exchange detailed data on stockpiles and deactivate and stand-down all strategic nuclear delivery systems affected by START II immediately following ratification of the treaty.\textsuperscript{90} Both leaders also pledged to seek ratification of START II by spring 1995. In November 1993, the administration submitted the CWC to the US Senate for approval, only to withdraw the accord in the face of concerted opposition. The CWC was eventually ratified in April 1997 following a bitter battle in the Senate.\textsuperscript{91}

As the NPT Review and Extension Conference approached, administration officials and US diplomats lobbied hard to garner support for an indefinite extension. Many nonnuclear states feared that an unconditional and unlimited extension would allow the nuclear weapon states to defer action toward fulfilling their article VI commitments indefinitely.\textsuperscript{92} Yet many also believed that they had benefited from the treaty's restrictions and were generally supportive of extending the pact's life, as long as some mechanism could be found to enhance the accountability of the nuclear weapon states. Attuned to the need to convince other nations of the United States' intention to fulfill its treaty obligations, American officials pointed to significant progress since 1989 in halting and reversing the nuclear competition between the United States and the Soviet Union. A notable shift in the language used to describe US objectives was also evident. In an address to the delegates attending the 1995 NPT Review and Extension Conference, Vice President Al Gore reaffirmed the United States' commitment to the goals of Article VI. John Holum, then director of the US Arms Control and Disarmament Agency made careful references to the eventual elimination of nuclear weapons in several speeches both before and after the NPT conference. In an address to an
international seminar on nuclear disarmament in Japan, for example, Holm declared that “we share the same ultimate goal [nuclear disarmament],” but continued “what we have not shared, to date, is a common vision of how to get there.” Holm lauded the work of the Canberra Commission, the Stimson Center, the Atlantic Council and other groups that had proposed a “series of discrete steps . . . each building on its predecessor, and carefully calibrated to the realities of the international security environment at the time.” He contrasted such pragmatism with misguided timebound programs for disarmament: “To demand complete elimination of nuclear arms according to a fixed calendar is to throw sand into the gears of disarmament.”93

In the end, the NPT was extended indefinitely, but to secure broad support, new “Principles and Guidelines” were also approved.94 The principles identified specific benchmarks for measuring progress toward realization of the treaty's objectives and provided for a strengthened review process. The package deal represented a compromise between the non-nuclear weapon states' conflicting impulses to save the treaty and to retain leverage over the nuclear powers. The decision also served notice to the nuclear weapon states that their actions would be closely monitored to see whether their rhetorical reaffirmation of the Article VI commitment would indeed be followed by deeds.

Topping the list of steps to be taken was the completion of a Comprehensive Test Ban Treaty by fall 1996. The failure of the nuclear weapon states to conclude a treaty banning all nuclear testing had been a perennial complaint of the non-nuclear weapon states at the four previous review conferences for the NPT and had resurfaced again at the decisive 1995 conference that decided the treaty's fate. After 12 years of US opposition, the Clinton administration had declared that the United States was committed to concluding a CTBT, leaving China and France among the five declared nuclear weapon states as the strongest holdouts against a test ban.95 The United States also twice extended a moratorium on nuclear testing. Through concerted diplomacy, the administration finally secured completion of the treaty, although full implementation remains in doubt under the pact's complicated entry-into-force formula.96

Following completion of the CTBT, the administration in 1997 undertook several important steps to adjust force requirements and targeting guidance to the emerging strategic realities; the assumptions and premises underlying nuclear doctrine were left intact, however. Meeting in Helsinki in March 1997, Presidents Clinton and Yeltsin agreed that a START III
agreement would establish ceilings of 2,000 to 2,500 strategic nuclear warheads each. In May, the Quadrennial Defense Review (QDR), touted as a "fundamental and comprehensive examination of America's defense needs from 1997 to 2015," reaffirmed the importance of US nuclear forces "as a hedge against NBC [nuclear, biological, chemical] proliferation and the uncertain futures of existing nuclear powers, and as a means of upholding our security commitments to allies." In keeping with the new Helsinki guidelines, the QDR acknowledged, however, that these roles could be met at lower force levels.

In late 1997, US targeting requirements were subsequently brought into line with projected START III force levels with the issuing of Presidential Decision Directive 60, which replaced the 1981 guidance issued by President Reagan. The new PDD reportedly stipulated that US nuclear forces would be aimed at deterring nuclear attacks by threatening devastating retaliation, rather than at winning a protracted nuclear war. As in the past, however, US planners were ordered to retain strike options against military and civilian leaders in Russia and against Russian nuclear forces. Moreover, added to the list of planning contingencies was a broader range of sites in China as well as strikes against an enemy armed with biological or chemical weapons.

Additionally, the US would retain the ability to launch its nuclear weapons upon warning of an impending attack. Noting that nuclear weapons "now play a smaller role in our security strategy than at any point during the nuclear era," Robert Bell, special assistant to the president and senior director for defense policy at the NSC also warned that "it would be a mistake to think that nuclear weapons no longer matter, or that they no longer matter to this administration."

Although the administration's actions represented an adjustment to post-Cold War realities, they fell far short of the fundamental overhaul of nuclear policy and doctrine urged by many in the nongovernmental community. There was no sustained vocalization of the zero objective after the NPT's extension. Instead, the Clinton administration made it clear that it remained firmly committed to continued reliance on nuclear weapons as a cornerstone of US security policy. After pronouncing the United States’ commitment to support a zero-yield comprehensive test ban treaty, Robert Bell declared: “As part of our national security strategy, the United States must and will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with access to strategic
nuclear forces from acting against our vital interests. . .". To ensure the “maintenance of a safe and reliable nuclear stockpile”—and to appease critics in the national laboratories and Department of Energy who strongly opposed a ban on nuclear testing—the administration crafted an elaborate Stockpile Stewardship Program. PDD 60 was further evidence that NGOs had largely failed to penetrate the "inner sanctum" of policymakers who controlled nuclear doctrine. The new directive reportedly was prepared by a small number of policymakers (roughly a dozen) from the NSC, the Defense Department, the Joint Chiefs of Staff, the CIA, the State Department, and the office of Vice President Al Gore. Officials at the Department of Energy and the Arms Control and Disarmament Agency, including then ACDA Director John D. Holum, were apparently not consulted. Admittedly, the administration had fought and won tough battles to extend the NPT and secure a CTBT, but even after these important victories had been achieved—and even after it was clear that the "hedge" strategy embodied in the 1994 Nuclear Posture Review was no longer needed because of deteriorating conditions in Russia—the president remained either uninterested in nuclear matters or unwilling to challenge the supporters of nuclear orthodoxy.

If the objective of elimination advocates was to persuade the Clinton administration to undertake fundamental changes in US nuclear policy and doctrine, and that of the counter-reformers to obstruct such change, then in the end, neither advocates nor counter-reformers would be fully satisfied. While NGO activists were encouraged by the administration's efforts to secure ratification of both START II and the Chemical Weapons Convention, to achieve an indefinite extension of the NPT, and to complete a test ban treaty, calls for more far-reaching changes fell on deaf ears. The counter-reformers, on the other hand, grumbled about the implications of a ban on nuclear testing for the reliability of the US deterrent and cautioned against reductions that would weaken the United States' ability to deter conventional and unconventional threats. They could be satisfied, however, that there had been no fundamental reorientation of US thinking about nuclear weapons.

**Summary of Phase I Objectives, Targets, and Actors.**

The international context during phase I was highly conducive to NGO efforts to encourage new thinking about the role of nuclear weapons in political relations between the United States and Russia and in international politics more generally. Improving US-Russian relations fostered a sense of new possibilities and the belief that it was possible to create cooperative security partnerships between the erstwhile nuclear rivals. The end of the East-
West conflict also created political conditions conducive to completion of a series of arms control and nonproliferation agreements, which in turn helped to reinforce positive trends in political relations between the United States and Russia. Additionally, the election of new governments in both countries, in theory, created new opportunities for those in and outside of government who might favor policy initiatives that represented a significant break with the past.

NGOs during this period hoped to secure both broad and specific policy outcomes. First and foremost, the nongovernmental community sought to persuade policymakers to embrace what was, for many, a simple and compelling notion: that pursuit of the long-term goal of nuclear elimination could enhance US national security. Achievement of that overarching objective required pursuit of many intermediate objectives described by Keck and Sikkink:

*Issue Creation and Agenda Setting:* The first challenge facing NGOs was presidential indifference or diffidence and public disinterest. The nongovernmental community therefore first had to make an issue of the Cold War nuclear legacy—both the thousands of nuclear weapons still deployed on high alert and the intellectual and psychological legacy that shaped thinking about the political and military value of these weapons. Information and analyses were used to highlight the danger of Cold War policies and the risks to US national security associated with unchecked nuclear proliferation, which, advocates of change argued, would be encouraged by the continued reliance of the United States and others on nuclear weapons for their security. NGOs also advanced a comprehensive and detailed agenda that represented a fundamentally new approach to nuclear weapons.

*Change in Discursive Practices and Change in Policy:* The core components of the NGO agenda were a sustained verbal commitment to eventual nuclear elimination (*a change in discursive policy*), and implementation of that commitment through significant reductions in nuclear forces, a new declaratory policy that explicitly diminished the role of nuclear weapons to the “core function” of deterring other nuclear threats, and massive and fundamental changes in nuclear doctrine consonant with the new interpretation of nuclear roles and compatible with dwindling force levels (*changes in policies*).
Additionally, NGOs supported a detailed and familiar list of arms control and nonproliferation goals, including both START agreements, a CTBT, and denuclearization agreements with Belarus, Kazakhstan, and Ukraine.

*Change in Institutional Procedures:* Many NGOs urged President Clinton to undertake a truly fundamental review of US nuclear policy and doctrine, a goal many believed could only be accomplished through an interagency process under presidential direction that introduced alternative views to the nuclear orthodoxy institutionalized in the Pentagon.

The nongovernmental community faced formidable challenges in its efforts to advance this ambitious agenda. NGOs were seeking nothing less than to convince a president—who faced competing demands for his time and political attention—to overthrow decades of thinking about nuclear weapons that was deeply embedded in national security institutions and policymaking procedures. The administration, for its part, was focused more on near-term objectives—NPT extension, CTBT, START II—that entailed urgent deadlines. Questions of doctrine, which interested few outside of the strategic community, were of lower priority and separable from these other immediate objectives that NGOs largely supported. In short, NGOs were trying to achieve a paradigm shift, while the US government operated at the level of incremental change.

The target audience for NGO activities and efforts was, first and foremost, the US president and, secondarily, high-level officials in the Clinton administration, leading Congressional figures, and members of the US strategic community. Tertiary targets were opinion leaders around the countries and public opinion.

The network of nuclear activists during this initial phase was comprised primarily of policy research institutions, former civilian defense officials, and senior retired military commanders. As momentum built in the run-up to the 1995 NPT Review and Extension Conference, grass-roots groups and advocacy organizations joined in the campaign. For the most part, however, the two groups operated independently, pursued different strategies, and used separate channels of communication. The strategy of the first group was to use serious analysis and reasoned argument to persuade government policymakers and political leaders of the national security benefits of nuclear elimination. Moral arguments, which had featured so prominently in earlier disarmament campaigns, were jettisoned in favor of arguments couched
in terms of “national interest,” pragmatism, and incrementalism. Advocacy groups, in contrast, often spoke the language of moralism and demanded that nuclear disarmament be achieved rapidly and without preconditions. Both groups drew attention to the gap between the international obligations of the nuclear weapon states and their actual policies and actions—a tool that Keck and Sikkink have termed “accountability politics.”

Over time, the diversification of the NGO network contributed to a cacophony of messages that ultimately left disarmament advocates vulnerable to the attacks of anti-abolition policy research institutions, which skillfully blurred the distinction between the “realistic” arguments of policy analysts and the demands of grass-roots activists.

**PHASE II: GLOBALIZING THE DEBATE**

The international conditions at mid-decade were highly favorable to efforts intended to reduce the importance and value of nuclear weapons. The three "rollback" agreements with Soviet successor republics, the 1994 Agreed Framework agreement with Pyongyang, and widespread support for intrusive verification activities in Iraq prompted many to laud a new era in the enforcement of the nonproliferation norm. Just as a positive synergy between these international developments began to bear tangible results, however, the faltering Russian experiment in democratic and market reform, a budding debate over NATO expansion, and new proliferation threats began to erode political support for further progress toward the marginalization of nuclear weapons.

**International Initiatives.**

The 1995 Review and Extension Conference for the NPT provided NGOs a rallying point for activities intended to advance the vision of a non-nuclear future. Eager to exploit governmental and public interest in nuclear issues and the sense of urgency generated by the NPT conference, many organizations launched new initiatives in the months preceding and directly following the 1995 conference. For example, the International Network of Engineers and Scientists Against Proliferation (INESAP) convened two conferences in 1993 to discuss
the future of the nonproliferation regime and created a study group the following November to discuss a process for transforming the traditional nonproliferation regime into a nuclear-weapon-free regime. The study group's report was released on the eve of the NPT review conference.\(^{105}\) Spurred by the awarding of the 1995 Nobel Peace Prize to its president, Joseph Rotblat, the Pugwash Conferences on Science and World Affairs decided to revisit the problem of achieving nuclear disarmament and in October 1996 convened a workshop in London devoted to discussion of the "Problems in Achieving a Nuclear-Weapon-Free World." The workshop resulted in the publication of a second volume on nuclear disarmament entitled *Nuclear Weapons: The Road to Zero*.\(^{106}\)

Other global initiatives were also taking shape. In early 1995, former US Senator Alan Cranston launched the “Nuclear Weapons Elimination Initiative,” which sought to persuade prominent security experts and retired military officers from many countries to support a statement advocating complete nuclear disarmament.\(^{107}\) Like many in the American NGO community, Cranston was motivated by a deep concern about the spread of WMD and the conviction that support for the nonproliferation regime could not be sustained unless the five declared nuclear weapon states took concrete steps to move toward the abolition of nuclear weapons. With the support of the Rockefeller Foundation and Carnegie Corporation, and in cooperation with the Oscar Arias Foundation, the Gorbachev Foundation and the Rajiv Gandhi Foundation, Cranston began to probe high-level civilian and military leaders in many countries for their views on nuclear elimination. On December 5, 1996—one day after the announcement by Generals Goodpaster and Butler at the National Press Club in Washington, DC—Cranston’s initiative went public. Sixty-one retired generals and admirals from seventeen countries recommended deep cuts in existing nuclear arsenals, steps to gradually reduce the alert status of remaining deployed nuclear weapons, and a “long-term international nuclear policy . . . based on the declared principle of continuous, complete, and irrevocable elimination of nuclear weapons.” The statement was endorsed by seventeen senior retired military officers from Russia and an equal number from the United States; other countries represented included Canada, France, Great Britain, India, Japan, and Pakistan.\(^{108}\)
Another nongovernmental initiative—the World Court Project—actually predated the NPT conference but achieved a breakthrough during this period of intensified international interest in nuclear weapons issues. The project was a joint effort involving the International Peace Bureau, the International Physicians for the Prevention of Nuclear War, and the International Association of Lawyers Against Nuclear Arms. Their intent was to secure an advisory opinion from the International Court of Justice (ICJ) on the legality of nuclear use. As NGOs, however, they had no standing with the Court and therefore had to work through organs of the United Nations. They persuaded first the World Health Organization, then the General Assembly, to approve resolutions requesting opinions from the ICJ. The UNGA resolution, passed in December 1994, asked the Court for an opinion on whether "the threat or use of nuclear weapons in any circumstance [is] permitted under international law." In the months that followed, written statements were filed by twenty-eight states, with twenty-two states presenting oral statements to the Court in October and November. The nuclear weapon states, not surprisingly, defended the legitimacy of recourse to nuclear weapons and underscored the positive contributions of nuclear deterrence to world peace. The major non-nuclear weapon states were divided. Germany, for example, argued against an advisory opinion at all on both political and technical grounds, while a Japanese Foreign Ministry official argued that “the use of nuclear weapons is clearly contrary to the spirit of humanity that gives international law its philosophical foundation.” Malaysia and Indonesia criticized the nuclear weapon states sharply and argued that any threat or use of nuclear weapons ran contrary to the principles of humanity. The ICJ’s decision on 8 July 1996 represented a careful political compromise among the Court's fourteen judges. The Court termed the threat or use of nuclear weapons to be generally contrary to international law, but declined to declare the use of nuclear weapons unlawful under any circumstances. The judges also held, however, that the nuclear weapons states had the international obligation “to pursue in good faith and bring to a conclusion [emphasis added] negotiations leading to nuclear disarmament. . . .” Although many NGOs were disappointed at the ICJ's decision, they took heart from the critical passage—“bring to a conclusion”—which was perceived as strengthening the Article VI obligation of the NPT.

The publication of the Canberra Commission's report at once elevated the nuclear debate to the level of global leaders and expanded its geographic scope.

The Australian government under then Prime Minister P.J. Keating launched perhaps the most important global initiative of this
period. After consulting with a number of American NGOs and others about potential participants, the Australian government in November 1995 created an independent commission to "propose practical steps towards a nuclear weapon free world including the related problem of maintaining stability and security during the transitional period and after this goal is achieved." The "Canberra Commission on the Elimination of Nuclear Weapons" comprised representatives from Australia, Brazil, China, Egypt, France, Japan, Malaysia, Russia, Sri Lanka, Sweden, the United Kingdom, and the United States. The Commissioners met four times over the next two years and commissioned background papers from leading experts exploring key challenges related to the elimination of nuclear weapons. The group's final report, issued in August 1996, outlined a comprehensive program of immediate steps and longer-term measures to achieve the complete elimination of nuclear weapons worldwide. The report presented what is perhaps the most persuasive case for the declining utility of nuclear weapons, and considered in detail the daunting challenges associated with creating and maintaining an adequate regime to verify compliance with a global ban on nuclear weapons. The publication of the Canberra Commission's report at once elevated the nuclear debate to the level of global leaders and expanded its geographic scope. A change in the Australian government in March 1996 unfortunately made the Commission an orphan before it had completed its work. The new Australian government under Prime Minister John Howard oversaw the report's release, but otherwise had little incentive to promote the results of a group that it had no role in creating and whose recommendations it may have viewed with skepticism.

Other nonnuclear states—many of whom had opposed NPT extension—had their own ideas about nuclear disarmament. In August 1996, the “Group of 21” non-aligned states had called for the establishment of an ad hoc committee within the Conference on Disarmament to commence negotiations on an international convention to eliminate nuclear weapons within a specified timeframe, a demand that it had repeated during subsequent sessions of the CD. The nuclear weapon states, not surprisingly, rejected any role for the CD on matters pertaining to nuclear disarmament. By 1998, business in the CD had ground to halt and some observers had begun to speculate about whether the international body indeed could play any constructive role in international discussions of nuclear disarmament.

National Reverberations.
The US debate on the future of nuclear weapons and other global elimination initiatives had ripple effects in other countries as well. Among the nuclear weapon states, France and Britain made minor policy adjustments to the new strategic realities, while Russia drifted into greater reliance on its nuclear forces and China pushed ahead with nuclear modernization programs. In Germany and Japan, governments remained resistant to changes that might threaten extended nuclear deterrence, but NGOs in both countries launched independent projects exploring alternative nuclear futures.

**BRITAIN.** British academics and policy research institutions were divided on nuclear elimination. Sir Michael Quinlan, for example, argued that current political conditions made nuclear elimination both infeasible and undesirable and posited an alternative nuclear endstate—termed a "low salience nuclear world"—in which nuclear weapons would play a less prominent role in international relations and would be required in fewer numbers. Michael McGwire countered that the "real choice" was between moving to create a nuclear-weapon-free world or "returning inevitably to the high-salient nuclear world from which we have just been set free." Established research institutions, such as the International Institute for Strategic Studies, largely held themselves aloof from the disarmament debate, but a number of relative newcomers to the British nongovernmental scene were more favorably disposed toward a new nuclear agenda. The UK-based Acronym Consortium, for example, played a pivotal role in providing NGOs around the world with regular updates on developments within the Geneva Conference on Disarmament, the NPT PrepComs, the 1995 NPT Review and Extension Conference, and the CTBT negotiations. The Verification Research, Training and Information Centre (VERTIC) explored the problems associated with verifying the transition to low levels of nuclear weapons or to zero and considered whether such a verification regime could be sustained over time, while the Programme for Promoting Nuclear Non-Proliferation (PPNN) undertook a comprehensive review of various concepts, ideas and proposals for alternative nuclear futures. Nongovernmental experts and scholars also participated in discussions with the foreign and defense ministry officials during the Labour government's Strategic Defence Review (see below). In addition, traditional citizen action groups such as the Campaign for Nuclear Disarmament (CND) sought to interest the British public in the disarmament agenda.

As in the United States and elsewhere in Europe, however, there was virtually no public debate about the nuclear question. Defense issues generally played a minimal role in the 1997 elections, which brought the Labour Party back into government after years in
opposition. "New Labour's" election manifesto and pre-election strategy documents had raised hopes that a Labour government might undertake significant changes in British defense policy, including changes in the role of British nuclear weapons in national and European security. But the repositioning of the party under Tony Blair had effectively diminished the influence of traditional pro-disarmament constituencies within the party and effectively muted partisan differences on most defense matters. Echoing the conservatism of the Clinton administration's Nuclear Posture Review, the UK Strategic Defence Review, which was released on 8 July 1998, scaled back the planned Trident deployment and announced a series of operational measures designed to reduce the alert status of British nuclear forces, but otherwise essentially reaffirmed the government's commitment to maintaining an independent deterrent. The review also noted that much deeper reductions in US and Russian arsenals would be necessary "before further British reductions could become feasible." In the meantime, the review declared, "Our own arsenal . . . is the minimum necessary to provide for our security for the foreseeable future."122

FRANCE. In France, elite and public consensus in support of the French nuclear deterrent remained remarkably solid. Although some modifications in official French policy were discernible by mid-decade and a small number of French security experts engaged in international discussions of alternative nuclear futures, France avoided a wrenching reexamination of the purposes and risks associated with its independent nuclear deterrent. Former French Prime Minister Michel Rocard had participated in the Canberra Commission and endorsed the Commission's findings. But Rocard represented a small minority. The broad majority of French officials and scholars was deeply skeptical of the feasibility of eliminating nuclear weapons. At the same time, however, some recognized that nuclear policy would have to adjust to the dramatic changes in France's strategic environment. Therese Delpech, a senior official in the French Atomic Energy Agency, for example, advocated reduced dependence on nuclear weapons and a posture of "nuclear sufficiency."123

RUSSIA. While US-based NGOs argued the case for nuclear elimination, Russia was actually becoming more, not less, dependent on nuclear weapons for its security. With Russian conventional forces faltering under the weight of budget cuts, low morale, and technical failures, Russia in late 1993
renounced its declaratory policy of no-first-use. Although a number of analysts later pointed out that the Soviet NFU policy had in fact masked a different operational reality, the reversal was nevertheless a discouraging exception to the apparent trend toward reduced emphasis on nuclear weapons. While Yeltsin declared his support for further nuclear reductions beyond START II, conservative politicians and military experts remained largely wedded to Cold War assumptions regarding the political and military utility of nuclear weapons in Russian national security policy. Strategic nuclear weapons continued to be viewed as essential to maintaining peace with the United States and the other major powers and vital to preserving Russia's claim to great power status, while tactical nuclear weapons were perceived to offer defense against local threats along Russia's borders and to help with Russia's conventional deficiencies. For the most part, the Russian strategic community continued to think about nuclear weapons in terms of the need to maintain a secure second-strike capability and to preserve parity with the United States. While Russian analysts were prepared to accept further reductions, they stressed that the achievement of deeper cuts would be conditioned on good political relations with the West and a benign European security environment. When relations with the West began to sour, Russian convictions that nuclear weapons remained vital and irreplaceable tools of Russian foreign and defense policy hardened. A handful of fledgling nongovernmental organizations in Russia continued to champion cooperation, but had very little influence on Russian policymakers. After mid-decade, only a handful of defense experts were proposing more ambitious objectives. Many of these plans appeared to be intended to ensure that the United States would reduce its strategic nuclear forces in tandem with Russia, which many believed would be unable to maintain the target force levels specified in the 1997 Helsinki framework. Faced with growing economic, political, and social disarray and disintegration, the Russian public had other priorities than the elimination of nuclear weapons.

**CHINA.** While Chinese scientists and researchers privately expressed interest in the US and global debates about nuclear elimination and nonproliferation, public commentaries and analyses sounded familiar Chinese themes, such as the demand for a no-first-use agreement, the need for much deeper reductions in US and Russian nuclear arsenals, and the dangers of theater missile defenses. Official pronouncements continued to reiterate China's commitment to the eventual elimination of nuclear weapons, but nuclear modernization programs proceeded slowly but steadily throughout the 1990s. And China, it was clear, was
not prepared to participate in nuclear reductions until US and Russian arsenals had fallen to much lower, unspecified levels. In addition, the CTBT negotiations and the demands they placed on China to play a more active role in multilateral arms control discussions seemed to have strengthened China's resolve to develop a stronger indigenous expertise on nuclear weapons policy, arms control, and nonproliferation before it would be willing and prepared to participate fully in global arms control regimes.\textsuperscript{125}

\textit{GERMANY.} In Germany, the government of then Chancellor Helmut Kohl as well as the general public were largely uninterested in engaging in the debate about nuclear disarmament, reflecting not only a preoccupation with issues viewed as more pressing (above all, the monumental task of uniting two economies, polities, and societies separated for over forty years), but also a deep-seated ambivalence about jettisoning extended nuclear deterrence. With the exception of former Foreign Minister Klaus Kinkel's proposal in December 1993 to create an international nuclear weapons register, the Kohl government tended to go along with consensus Western positions on major nuclear issues.\textsuperscript{126} In an appearance before the ICJ, for example, Germany argued against a court ruling on the use of nuclear weapons. German politicians also responded coolly to the French government's proposal that French nuclear forces serve as the core of a future European nuclear deterrent. Although they took note of the stirring nuclear debate in the United States, most German politicians preferred to leave the nuclear Pandora's box unopened. For many, the virulent nuclear debates of the 1980s had left deep scars; no one was anxious to awaken latent anti-nuclear sentiment at the time that the country was struggling to surmount the daunting political and economic challenges of unification. There were a few exceptions, of course. A number of parliamentarians, including Friedbert Pflueger (CDU) and Gernot Ehler (SPD), chairman of the Bundestag's arms control and disarmament subcommittee, took an interest in nuclear issues and in April 1998 organized a hearing on nuclear disarmament featuring testimony by experts from the United States, Russia, France, Great Britain and Germany.\textsuperscript{127} Such events were rare occurrences, however. No German government was yet prepared to consider seriously a security alternative to reliance on US nuclear guarantees.

The German nuclear "debate" was thus confined largely to periodic contributions by noted security experts and a handful of academic and policy research institutions. With the support of the Volkswagen Foundation, the Peace Research Institute in Frankfurt launched an assessment of the international debate about disarmament and of European views on
alternative nuclear endstates.\textsuperscript{128} Representatives of more conservative NGOs, such as the Stiftung Wissenschaft und Politik and the Deutsche Gesellschaft fuer Auswaertige Politik, on the other hand, expressed skepticism about the feasibility of eliminating nuclear weapons absent an effective alternative security regime and stronger tools for combating proliferation.\textsuperscript{129}

\textbf{JAPAN}. In contrast to many other advanced industrialized states, the Japanese media and public took more note of nuclear weapons issues. A number of nongovernmental research organizations followed with interest the US and global debate on nuclear disarmament, and several leading Japanese dailies published long feature articles detailing the arguments and activities of pro-disarmament nongovernmental think-tanks and advocacy organizations in the United States. Prominent scholars published English-language commentaries and analyses on the future of the nonproliferation and test ban regimes, and offered Japanese perspectives on the problem of nuclear disarmament.\textsuperscript{130} In addition, Japanese institutions hosted several major international conferences focusing on nuclear disarmament featuring presentations by some of those involved in advancing the cause of nuclear disarmament in the United States and other countries.\textsuperscript{131} Yet, despite some public sympathy for the disarmament advocates’ cause, the Japanese government, like that of Germany, remained hesitant to take any action that might indicate a desire or willingness to do without US nuclear assurances. By the end of the decade, although some nongovernmental organizations in Japan were contemplating a world-wide civil society campaign for nuclear disarmament, growing concern about North Korean ballistic missile and WMD capabilities and about China’s strategic intentions in the region appeared to be pushing Japan into even closer defense cooperation with the United States. Although latent public sentiment, in theory, might favor nuclear disarmament, in practice, Japanese elites and political leaders did not appear prepared to do without the US nuclear umbrella.

\textit{Summary of Phase II Objectives, Targets, and Actors.}

By 1995, conditions were ripe for globalization of the debate about the future of nuclear weapons. Western rapprochement with Russia and a series of significant arms control and nonproliferation successes in the early 1990s appeared to lend credence to the arguments of pro-elimination activists that, over time, nuclear weapons could be marginalized
in international politics. The 1995 NPT Review and Extension Conference, as well as the negotiations to complete a CTBT by fall 1996 entailed both opportunity and risk for NGOs. On the one hand, the two events offered prime opportunities to raise the political profile of nuclear issues on governmental agendas and a wedge for NGOs seeking to force open the debate on the future of nuclear weapons. But the two events also threatened to crowd out the NGOs’ longer-term agenda, which entailed neither urgent deadlines nor concrete policy outcomes to be won or lost. For NGO activists, extension of the NPT and conclusion of a CTBT constituted important stepping stones on the path toward nuclear marginalization and eventual elimination; for government officials, these potential near-term gains for nonproliferation were separable from, and far more important than, a radical revision of nuclear policies and doctrines.

During Phase II, non-American NGOs and select foreign governments joined the effort to reframe the debate about nuclear futures and to persuade policymakers and publics around the world that the elimination of all nuclear weapons was a legitimate, feasible, and desirable goal. As in phase I, achievement of these broad and specific policy effects required the fulfillment of several important interim goals:

*Issue Creation and Agenda Setting:* To change policy, NGOs first had to raise the profile of nuclear weapons issues internationally. “Accountability politics,” which involved activities designed to draw attention to the gap between the legal commitments and actual policies of the five nuclear powers, featured prominently in NGO efforts during this phase.

*Change in Discursive Practices and Change in Policies:* A common goal of the Canberra Commission and other non-American efforts was a serious commitment to disarmament by the nuclear weapon states and a change in operational policies to reflect that commitment, including immediate steps to reduce nuclear dangers.

*Change in International Norms:* NGO activities during this phase were also directed more generally at building and strengthening support for nonproliferation as a universal, international norm.
With the globalization of the debate about nuclear elimination, the target audience for NGO activities became more diverse. Although many of the specific policy recommendations of international initiatives clearly were directed, in the first instance, at the governments of the United States and the other nuclear powers, the report of the Canberra Commission, like the statement by international military leaders or the G-21 program for timebound nuclear disarmament, were also weapons in the battle to sway international opinion. Phase II of the 1990s nuclear debates thus displayed a characteristic of some transnational action networks—the “boomerang” effect—whereby domestic activists seek to bring pressure on an unresponsive government by using international contacts to “amplify the demands of domestic groups, pry open space for new issues, and then echo back these demands into the domestic arena.”

Participants in the nuclear debate also became more numerous and diverse. Informal networks and formal alliances between NGOs were used during this period to lobby for the NPT’s extension and completion of a test ban treaty. The Canberra Commission represented an innovative hybrid; although the group was sponsored by the Australian government, the commissioners themselves were prominent former civilian and military leaders in their respective countries, and the Australian government consulted American and European NGOs to obtain analytical support for the Committee’s recommendations. Academic and policy research institutions in Europe and Asia/Pacific contributed new analyses and studies to the growing body of work on the problems associated with nuclear disarmament and began exchanging views with their counterparts in other countries through electronic communications links. These analytic efforts were complemented by the activities of an increasing number of grass-roots and citizen advocacy organizations, both in the United States and abroad, which used the NPT conference to try and generate broader public interest in nuclear disarmament. Finally, the states of the non-aligned movement joined in the fight to influence international public opinion.

Phase II brought a shift in NGO strategies as well. American NGOs had attempted to persuade the US strategic community that nuclear elimination was both feasible and in the United States’ national interest. In contrast, international networks of NGOs, foreign governments, and non-American NGOs tried to convince governments and publics around the world that decisions about the future of nuclear weapons could no longer be left solely to the states that possessed and controlled these weapons. In other words, they sought to cast the nuclear policies of the United States and other nuclear powers as a matter of legitimate
international concern and agitation. NGO tools in this campaign were familiar ones: information about nuclear dangers, analyses arguing the feasibility of nuclear elimination, reminders of international obligations, and the leverage that prominent political and military leaders could bring to bear on the governments of the United States and the other nuclear weapon states.

**PHASE III: ALTERNATIVES TO ZERO**

By 1997, the wave of enthusiasm for nuclear elimination appeared to have crested and subsequently began to recede. The bulk of NGO reports advocating nuclear disarmament had been released; although meetings and conferences devoted to various aspects of the disarmament issue continued to be convened, the political momentum that had contributed to a series of important arms control successes in the early 1990s seemed to be faltering. Some members of the American nongovernmental community still hoped to persuade a freshly reelected president to embrace the elimination agenda as his legacy to future generations, but Clinton appeared to be looking first to domestic issues, such as education and social security, when he thought about his place in history. If pressed, administration officials would defend the president’s record on arms control and plead a full plate of pending issues, above all, CTBT ratification and Russian approval of the START II accord, without which new initiatives in bilateral arms reductions were excluded. Fissures among the NGOs engaged in the nuclear futures debate became more evident as many experts, frustrated with government inertia and public apathy, began to doubt the utility of pushing an agenda that was out of sync with prevailing political winds and emphasized long-term objectives over measures to address urgent, near-term dangers. When it became clear that high-level support for nuclear disarmament would not be forthcoming, the focus of NGO discussion and activities shifted to policy alternatives that were viewed as more feasible under current political conditions and more appropriate to the risks associated with Cold War operational practices in Russia and the United States.

*Reducing Nuclear Dangers.*
In the United States, the theme of reducing near-term nuclear dangers became more prominent in NGO discussions of US nuclear policy. The rhetorical shift reflected not only tactical considerations but also real and growing concerns about the safety and security of nuclear weapons and materials in Russia, where political fragmentation, economic dislocation, and social dissatisfaction were taking their toll on Soviet-era systems. The greatest proliferation danger, some American observers began to argue, lay not in North Korea or Iraq, but in a disintegrating Russia, in which central control over nuclear weapons, weapons materials, and technological know-how was stolen or sold in desperation to the highest bidder. In this view, the most urgent task was to reduce these immediate risks, rather than focusing on long-term programs to eliminate nuclear arsenals. The focus on numbers gradually began to give way to complex discussions of alternatives to zero, such as de-alerting, nuclear “stand-down”, and “virtual” nuclear arsenals.

Concern about the accidental or unauthorized use of Russian nuclear weapons fueled interest in various proposals designed to reduce the alert status of nuclear forces in the United States and Russia. One of the earliest advocates of "zero alert," Bruce Blair of the Brookings Institution, proposed a global agreement to gradually remove all nuclear weapons from active alert status. Under Blair's plan, the United States and Russia first would take their weapons off hair-trigger alert, then follow with steps to remove warheads and other components from their delivery systems. To verify compliance with these dealerting provisions, monitoring arrangements would also be implemented. Over time, Blair reasoned, the time needed to bring nuclear forces to launch readiness could be extended to months or years, thus creating a functional equivalent of nuclear elimination. The regime would first be implemented on a bilateral basis, then extended to the smaller nuclear weapon states.133

Retired Admiral Stansfield Turner, former head of the US Central Intelligence Agency, proposed an alternative to the “painfully slow process of arms control agreements” that he termed “strategic escrow.” Under Turner's proposal, the United States would first remove unilaterally roughly 1,000 warheads from operational strategic launchers and place them in designated storage areas—or "escrow." The United States would then invite Russian
observers to count the number of warheads going into storage, to monitor movements of warheads, and to conduct surprise inventories. Even if Russia did not reciprocate, Turner reasoned, the United States still would have sufficient warheads to guarantee its security; on the other hand, if Russia undertook similar measures, a second increment of warheads could be placed in strategic escrow, reducing the level of actively deployed warheads in both countries to roughly 1,000 each. At this point, further reductions in ready, deployed warheads would have to be negotiated with the three smaller nuclear weapon states and perhaps the threshold nuclear weapon states as well. The "endstate" in Turner's proposal would not be the complete elimination of nuclear weapons, but rather a situation in which all nuclear warheads had been placed in internationally supervised storage, with each nuclear weapon state limited to no more than 200 warheads and accompanying launchers. Early warning of efforts to mate warheads to launchers would be guaranteed through the stationing of observers on the national territory of all nuclear possessors.¹³⁴

Yet another alternative to zero was the notion of “virtual nuclear deterrence.” Building on Jonathan Schell’s notion of “weaponless deterrence,” first introduced in The Fate of the Earth, virtual nuclear deterrence would preserve the purported stabilizing effect of nuclear deterrence, but also allow incremental movement toward the marginalization of nuclear weapons in world politics. Under the program proposed by Michael Mazarr of the Center for Strategic and International Studies, for example, states would first reduce the operational readiness of existing nuclear arsenals, and then proceed to dismantle these arsenals. Verification provisions would involve storage of nuclear warheads, fissile material and delivery vehicles in different locations, each subject to stringent inspection and monitoring procedures. Such a state of “virtual nuclear deterrence” would maintain weapons at much lower states of readiness and/or in varying stages of dismantlement, allowing states to nudge nuclear weapons “to the margins of world politics while allowing current nuclear powers to retain some of the core missions for nuclear forces by threatening to rebuild a few dozen weapon within a period of a few days or weeks.”¹³⁵

The need for near-term, creative approaches to address deteriorating conditions in Russia was also the theme of a January 1999 report by the Committee on Nuclear Policy, a US-based coalition of project directors, researchers and practitioners from the United States and Europe.¹³⁶ The Committee's report, JumpSTART: Retaking the Initiative to Reduce Post-Cold War Nuclear Dangers, comprised three elements: a new approach to nuclear reductions, steps to remove US and Russian nuclear forces from “hair-trigger” alert, and a
new regime to ensure effective control of all fissile materials and warheads. To overcome the stalemate in US-Russian bilateral reductions and accelerate the reductions process, the Committee proposed that the US and Russia separately undertake parallel, reciprocal and verifiable reductions to a total of 1,000 nuclear weapons each, to be followed by multilateral discussions to achieve even deeper cuts. An immediate stand-down of all forces slated for destruction under START II, and a parallel, reciprocal commitment to eliminate launch-on-warning options from nuclear war plans were also proposed, as well as the creation of a cradle-to-grave transparency and monitoring system for all warheads and fissile materials.137

Interest in eliminating nuclear weapons had not disappeared entirely, however. In 1998, Jonathan Schell returned to the topic of nuclear disarmament in *The Gift of Time*. The book, which argued the case for urgent action to achieve nuclear abolition, was based on an extensive series of conversations with prominent advocates of nuclear elimination. In the conclusion, the author lauded the role of nongovernmental organizations, retired military officers, and civilian officials for launching a "revolution from the side inward."138 Looking to the future, Schell observed that this "revolution" was expanding both upward to policymakers and "downward" to publics, who would, in Schell's view, ultimately be decisive in determining whether nuclear abolition was ever achieved. Although he viewed the prospects for large street protests and demonstrations as unlikely, the author noted that further "sideways" progress into professional organizations, "would provide the movement with depth and . . . staying power." Observing that "the path to abolition is by no means unobstructed," Schell nevertheless pointed with hope to "retired soldiers and statesmen" who "provide an early indication of deep but invisible changes of heart among those in power and also serve as a bridge to their incumbent colleagues."139

The alternative agendas advanced in these reports, though far more moderate than earlier elimination proposals, once again met widespread public apathy, lack of media interest, and governmental preoccupation with other issues.140 Over the course of the previous year, national and international news outlets had carried stories describing the deteriorating conditions at Russian nuclear facilities.141 But concern about "loose nukes" never intensified to the point that American leaders saw the political advantage or necessity of undertaking bold initiatives.
In the meantime, growing anti-western sentiment in Russia, donor fatigue in the West, and US-Russian differences over Iraq, sales of sensitive technologies to Iran, and other national missile defenses were dispelling rosy predictions of a new era of east-west comity and partnership. START II remained mired in Russian domestic political struggles, and the Clinton administration insisted that it would undertake no new initiatives until the Duma had approved the accord. As long as the administration continued to hear encouraging words from Russia, US officials were reluctant to take any action that might undercut Duma ratification. Even if the accord was finally approved, however, it was likely to be with conditions that would either prove unacceptable to the US Senate or mandate subsequent Senate actions to protect the Anti-Ballistic Missile (ABM) Treaty. By early 1999, political relations between the United States and Russia made the Helsinki framework for a follow-on START agreement appear increasingly unattainable.

Other international developments were helping to bring the nuclear campaign to a standstill. Having survived a domestic impeachment crisis, the Clinton administration quickly became embroiled in the deteriorating situation in the Balkans, a brewing crisis in Sino-American relations over reports of Chinese espionage, and in domestic battles over a decision to deploy national missile defenses. Taken together with the Indian and Pakistani nuclear test explosions in May 1998, the collapse of the UNSCOM inspection regime in Iraq, and renewed reports that an increasingly desperate North Korea had resumed its nuclear weapons program, discussion of nuclear disarmament was abandoned by all but a handful of grass roots advocacy organizations. Under these circumstances, most nongovernmental organizations considered further efforts to advance the zero objective as unrealistic and turned instead to securing the near-term arms control gains still at stake.

**New International Initiatives.**

While the US debate shifted to discussion of near-term programs to address the growing emergency in Russia, political leaders of several mid-range powers were seeking to revive international interest in nuclear disarmament and to halt the slide back into the world of
“high-nuclear salience” that McCGwire had predicted. In June 1998, the Irish government, in cooperation with seven other “middle powers,” formed the New Agenda Coalition (NAC). First in a letter to the United Nations Secretary General and then in a resolution introduced to the UN General Assembly, the NAC called for immediate action toward nuclear disarmament. Acknowledging the work of the Canberra Commission, the NAC resolution proposed a series of familiar steps toward elimination, including reductions in the alert status of nuclear forces and a treaty banning the production of fissile material for military purposes, as well as negotiation of an international convention to eliminate nuclear weapons. The General Assembly adopted the resolution 114 to 18, with 38 abstentions. Notably, among the states abstaining were several NATO members, including Canada and Germany, who had heretofore sided with the United States.

In the months that followed, cracks in the consensus among Western countries became more evident. In fall 1996, the Canadian Minister of Foreign Affairs, Lloyd Axworthy, requested a parliamentary review of Ottawa’s nonproliferation and arms control policies. The report of the Committee on Foreign Affairs and International Trade was released in early December 1998 following a year of meetings, hearings, and expert testimony. In carrying out the review, the Committee noted that it had benefited from the statements of retired political and military leaders, such as former US STRATCOM head General Butler, as well as from the substantial body of work completed by various nongovernmental organizations and international groups such as the Canberra Commission.

Although press reports quickly focused on what the Committee reportedly had considered but then failed to recommend—namely, a NATO no-first-use policy and the withdrawal of remaining NATO non-strategic nuclear weapons from Europe—in fact, both the general tenor of the report as well as many of its specific recommendations reflected a significant—and public—break with the nuclear orthodoxy of the United States. Noting that the case for pursuing the elimination of nuclear weapons was “more compelling than ever,” the Committee nevertheless acknowledged that “the elimination of nuclear weapons . . . will not be achieved easily or quickly.” The challenge, the Committee noted, was in crafting practical steps that would advance the long-term goal of nuclear elimination. The guiding principle for the Canadian government, the Committee suggested, should be a policy aimed at "delegitimizing and reducing the political value of nuclear weapons." While the Committee fell short of endorsing a NATO no-first-use policy and the withdrawal of US tactical nuclear weapons from Europe, the group observed that "NATO failure to address the nuclear issue within its re-examination of the Strategic Concept would be taken as evidence of a
fundamental lack of political will and leadership, and tend to decrease, rather than increase, international security.\textsuperscript{147} The Committee recommended "that the Government of Canada argue forcefully within NATO that the present re-examination and update as necessary of the Alliance Strategic Concept should include its nuclear component."\textsuperscript{148} The concept of de-alerting also received the Committee’s endorsement, as did efforts to “encourage public input” into the process of nuclear disarmament, and investigation of “innovative means to advance the process of nuclear disarmament” that would draw on the “lessons of the Ottawa [landmines] process.”\textsuperscript{149}

The new German government under Social Democratic Chancellor Gerhard Schroeder was the next among allied governments to raise the nuclear question. In November 1998, Foreign Minister Joschka Fischer announced in an interview with the German weekly \textit{Der Spiegel} that Germany intended to raise the issue of no-first-use within the context of the then ongoing NATO strategy review, which was to be completed by the 50\textsuperscript{th} anniversary summit of NATO leaders in April 1999\textsuperscript{150} Although couched in careful terms, Fischer’s announcement unleashed a firestorm of criticism in Washington, where US officials accused Germany of alliance disloyalty and flatly rejected any change in NATO nuclear policy.\textsuperscript{151} Strong US criticism and pressure on the European allies, as well as Berlin’s concerns about the political costs to the alliance of a divisive battle over nuclear strategy just as it was facing a worsening situation in the Balkans, finally convinced German leaders not to raise the nuclear issue at the summit.\textsuperscript{152}

Although some governments may have been sympathetic to Fischer's arguments about the need for a reexamination of NATO nuclear policy, few were anxious to reopen the issues that had caused many governments considerable domestic political troubles during the early 1980s—particularly at such a crucial time in NATO’s evolution. Only a month after the formal accession of the Czech Republic, Hungary, and Poland to the North Atlantic Treaty Organization, the alliance became embroiled in Kosovo. The months leading up to the summit were also taken up with intensive discussions of the scope of NATO actions and the conditions under which it might become involved in what were referred to as non-Article V operations, e.g., operations outside the geographic area of NATO members. Initial discussions of nuclear issues at the December 1998 ministers meeting of the North Atlantic Council made it clear that there was no broad support for a fundamental review of the alliance's nuclear policy, which many felt was bound to be divisive.\textsuperscript{153} While Canada and some smaller European countries were thought to be sympathetic to the German position,
British Defense Minister George Robertson in February 1999 had categorically rejected a no-first-use policy. In the end, NATO members closed ranks and attempted to craft compromise language that could be accepted by all. The new strategic concept reaffirmed the "essential role" of nuclear forces in the preservation of peace and prevention of conflict and characterized the peacetime basing of nuclear forces in Europe as "an essential political and military link" between the United States and its European allies. The alliance also noted, however, that the security situation in Europe had changed radically and that "the circumstances in which any use of nuclear weapons might have to be contemplated by them are therefore extremely remote."

**Summary of Phase III Objectives, Targets, and Actors.**

By the end of the decade, the faltering reform process in Russia, repeated challenges to the nuclear nonproliferation regime by North Korea and Iraq, and the Indian and Pakistani nuclear text blasts were fueling skepticism about the feasibility and desirability of the zero objective. In the emerging strategic environment, assertions of a new security paradigm put forward by proponents of radically reduced reliance on nuclear weapons appeared less credible than they had at Cold War’s end. At the same time, more urgent near-term dangers, including the potential leakage of nuclear weapons or materials from a disintegrating Russia and deteriorating command and control systems in the Russian Federation caused many experts to question the value of efforts that focused on goals that could only be achieved after many decades, if at all. In the absence of a new nuclear catastrophe, many reasoned, it was difficult to translate latent public concern about “loose nukes” into positive political support for much reduced reliance on nuclear weapons.

Government champions of a new nuclear agenda were also becoming scarce. The US administration, preoccupied with domestic political scandal, remained deaf to calls for more fundamental change and seemed at a loss for alternatives to the traditional processes and structure of arms control, which might or might not be appropriate to the emerging strategic realities. Views in Russia and China, if anything, had hardened. In Britain and Germany, the newly elected Labour and SPD-led governments quickly dashed the hopes of grass-roots activists in Europe and the United States that dramatic new initiatives to drastically reduce Europe’s reliance on nuclear weapons would be forthcoming. Although both Canada and Germany tried to persuade their alliance partners to consider a change in alliance nuclear policy, even sympathetic European states had little enthusiasm for a divisive
During this final phase, the deteriorating political climate led to differences among American NGOs, and between US-based groups and their foreign counterparts over approaches, plans and strategies. The problems seemed so severe and multifarious that it no longer appeared possible or perhaps desirable to rally around a single objective. The clear, compelling notion of a world free of nuclear weapons gave way to complex proposals that were appropriate to the new strategic realities, but that often appeared dense and incomprehensible to all but the experts. Publics remained complacent, the media uninterested, and policymakers otherwise preoccupied. Increasingly, seminars and conferences among policy research institutions came to resemble dialogues among the converted, which the counter-reformers studiously ignored. Grass-roots citizens groups and networks such as Abolition 2000 continued to champion the cause of nuclear disarmament, but at much reduced rates of activism. Washington-based advocacy groups, for their part, turned their attentions to the looming battle over ratification of the CTBT. By the end of the decade, many academic and policy research institutions had turned their attention to new security issues. Networks of NGOs continued to coordinate their respective advocacy and research activities, but momentum had been lost.

Assessing the Nuclear Debates of the 1990s

On the face of it, the NGO debate about nuclear elimination and other nuclear “endstates” appeared to accomplish very little. Ten years after the fall of the Berlin Wall, the United States and Russia have reduced their arsenals from Cold War levels, but many operational practices remain largely unchanged. Moreover, important arms control and nonproliferation achievements are at serious risk of being lost. START II may never be implemented, while START II, the Intermediate Range Nuclear Forces (INF) Treaty, and even the Cooperative Threat Reduction program could fall victim to US-Russian differences over Kosovo and ballistic missile defenses. Support for the nonproliferation norm may be waning, with some observers even predicting that the NPT regime could gradually collapse under the strain of multiple challenges. The CTBT remains unratified by the US Senate, and some political observers predict that domestic political squabbles between the White House and Congressional Republicans will prevent any movement toward treaty ratification before October 1999, when an international conference to consider measures to accelerate the treaty’s entry-into-force is likely to be convened. Rather than entering an era of nuclear
marginalization and de-legitimization, the world may be drifting back into an era of “high nuclear salience.” The window of opportunity noted by many NGO nuclear activists and analysts appears to have closed; whether temporarily or indefinitely, is as yet unclear.

But to dismiss the nuclear debates as ineffectual is to overlook important NGO accomplishments. It is true that the nongovernmental community never achieved its ultimate objective, namely a serious and sustained commitment by the United States and other nuclear weapon states to eliminate nuclear weapons, accompanied by far-reaching changes in nuclear doctrine and broader nuclear policy. If one distinguishes between intermediate and ultimate objectives, however, then NGOs in fact achieved important victories that could provide the foundation for future efforts to further reduce the legitimacy and value of nuclear weapons. In short, a fair evaluation of the campaign's accomplishments and failures must take into account the long timeline involved in a civil society campaign seeking to achieve a fundamental shift in the way that a particular problem and its solution is viewed.

**Accomplishments and Failures.**

In evaluating the outcome of NGO efforts, it is helpful to review the hierarchy of objectives pursued by advocacy networks. As seen in table 2, some objectives were unchanging throughout the campaign. For example, during all three phases, NGOs struggled to make nuclear dangers an issue with governments, legislatures, and publics. The specific policy changes sought by NGOs, on the other hand, varied according to the phase and type of organization, with more emphasis on acceptance of the zero objective at the outset and more focus on near-term changes in operational practices during phase III. As depicted in table 2, NGOs were successful at achieving several important interim objectives with respect to their principal target audiences.

First, NGOs succeeded in making Cold War nuclear policies, postures, and doctrines a topic of sustained, serious debate for several years within the US strategic community and in important international fora. The depth and eventual scope of the debate among policy
experts would have been inconceivable absent NGO activism, particularly given the lack of catalyzing events to create a sudden groundswell of public and political support for changes in policy. Making an issue of existing nuclear doctrine and policy required the introduction of persuasive information and analyses that highlighted the dangers associated with Cold War practices and beliefs, argued the case for change, and offered credible solutions. The resultant studies and reports, as well as the public pronouncements of senior retired military commanders and prominent civilians, did not go unnoticed by the US and other Western governments, as evidenced by the temporary shift in official rhetoric regarding nuclear disarmament and the Clinton administration’s increasingly defensive defense of its record on nuclear risk reduction. By the end of the decade, moreover, the arguments presented in NGO analyses were being echoed back by several key countries that have begun to distances themselves from American nuclear orthodoxy.  

In short, NGOs made significant progress toward reframing the debate about nuclear risks—an essential step toward achieving more ambitious objectives. NGO interventions must be credited, in particular, with raising questions about the political and military value of nuclear weapons in a changing world and with drawing attention to emerging dangers against which nuclear deterrence, as it had evolved during the Cold War, might be ineffective or irrelevant. Additionally, NGO analyses helped to focus attention on new nuclear dangers, particularly the risks associated with high states of alert and inadequate safety and security procedures. Finally, although the counter-reformers termed programs for nuclear elimination politically naive, in fact, many proposals explicitly recognized that progress toward nuclear abolition could only be achieved if certain conditions were met. The political and technical prerequisites for nuclear disarmament, the dangers of nuclear breakout, and other issues deserve further exploration. But the nongovernmental community has provided a detailed menu of proposals and rich analyses of the problems associated with nuclear elimination and their potential solution. There will be no dearth of relevant studies, ideas, and recommendations, should the political conditions conducive to phased nuclear elimination become extant.

Second, NGOs helped to secure important changes in state policy and behavior. These hard-won victories may appear paltry in comparison to the ultimate, illusive
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prize—nuclear elimination—but they nevertheless demanded considerable political energy and diplomatic effort to achieve. It is of course impossible to determine with any precision what part NGOs played, for example, in the successful extension of the NPT or conclusion of a test ban treaty, since only states had the ability to make these decisions. But persistent public pressure from the nongovernmental community as well as quieter track-two diplomatic efforts probably helped facilitate these desired outcomes. In addition, NGO advocacy of radical objectives may have made it easier for governments to adopt goals that otherwise might have encountered forceful domestic opposition. For example, the Clinton administration’s decision to adopt lower force level objectives for START III in the Helsinki framework might have been more controversial absent the debate about nuclear elimination. On this point, it is important to maintain some historical perspective. Reductions to a level of 2000 deployed strategic nuclear warheads each for Russia and the United States would have appeared ambitious and groundbreaking only five years earlier; by 1997, serious discussion of even lower force levels was commonplace and the Clinton proposals appeared modest by comparison. The fact that governments could effectively decouple the near-term agenda of NGOs—which many governments supported—from the long-term program of elimination—which most did not—should not detract from the significant nonproliferation victories achieved during this period. In fact, much of the short-term agenda of the nongovernmental community was embraced.

Third, the nongovernmental community helped to strengthen the international norm against proliferation. During the NPT Review and Extension Conference and throughout the subsequent negotiations to complete a CTBT, NGOs played a crucial role in keeping governments focused on the linkage between the future of the nonproliferation regime and further progress toward reducing and eliminating the nuclear arsenals of the United States, Russia, Britain, France, and China. Not coincidentally, from the mid-1990s on, Western governments began to speak of the Article VI commitment with new seriousness.

Finally, the nuclear debates of the 1990s further weakened the claim of governmental experts and officials to a monopoly of expertise and wisdom on the nuclear issue. The involvement of respected policy research institutes and, even more, the engagement of senior retired military commanders and civilian defense officials who had once been directly responsible for these weapons broadened the circle of experts "qualified" to weigh in on the complex issues of nuclear doctrine. Additionally, a nascent transnational community of experts, who met routinely at various international conferences and communicated otherwise.
on a routine basis through various email listserves, was beginning to emerge.

<table>
<thead>
<tr>
<th>Campaign Objectives</th>
<th>Indicators of Success</th>
<th>Accomplishments &amp; Failures (1992-99)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue creation/Agenda setting</td>
<td>Sustained interest of target audience(s) (president, cabinet, Congress, public) in nuclear issue; adoption of new nuclear agenda comprising far-reaching changes in nuclear policy and doctrine</td>
<td>Government interest in near-term nuclear threat reduction agenda (START process, CTR, NPT extension, CTBT) but rejection of fundamental changes and long-term goal of elimination</td>
</tr>
<tr>
<td>Change in institutional procedures</td>
<td>Interagency review of nuclear policy and doctrine under presidential guidance or other supra-institutional review</td>
<td>DOD-conducted Nuclear Posture Review that reaffirmed existing nuclear policy, posture and doctrine</td>
</tr>
<tr>
<td>Change in discursive practices</td>
<td>Sustained vocalization of the zero objective by president and top leaders</td>
<td>Government statements referring to nuclear elimination at time of NPT extension and CTBT negotiations</td>
</tr>
<tr>
<td>Change in policy</td>
<td>Fundamental reexamination of and changes in nuclear policy and doctrine.</td>
<td>Reductions in force level requirements and adjustments in targeting guidance</td>
</tr>
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<td></td>
<td></td>
<td>No overhaul of nuclear doctrine; some support for expansion in nuclear roles to counter CBW threats/attacks</td>
</tr>
<tr>
<td>Change in state behavior</td>
<td>Actions aimed at reducing legitimacy/importance of nuclear weapons</td>
<td>Continued reliance of P-5 on nuclear weapons in broad range of roles</td>
</tr>
<tr>
<td>Change in international norms</td>
<td>Discursive practices and actions to support a strong international norm against the proliferation of nuclear weapons.</td>
<td>Nuclear rollback in FSU, Brazil, Argentina, and South Africa; support for intrusive verification of WMD dismantlement in Iraq; extension of NPT</td>
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<td></td>
<td></td>
<td>Challenges to NPT by India, Pakistan, North Korea, Iraq</td>
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On the other hand, the ultimate objective of many groups' efforts—serious pursuit of nuclear disarmament, as evidenced in radical changes in nuclear doctrine and policy—remained illusive. In the United States, presidential and cabinet-level attention to nuclear dangers tended to be sporadic and focused almost entirely on urgent near-term battles; sustained high-level interest in measures to reduce nuclear dangers was not achieved. Additionally, despite some indication of growing public concern about the proliferation of weapons of mass destruction, legislatures and publics remained largely disengaged in the debate about the future of nuclear weapons. Even at the highpoint of activity (1995-96), the nongovernmental community that cared about these issues largely failed to arouse the public out of its complacency. Media coverage of nuclear issues tended to be sporadic and episodic, with the exception of reporting and commentary on the generals' statement regarding nuclear elimination in late 1996 and General Butler’s public presentations. Similarly, although specific components of the nuclear activists' agenda were adopted, governments were not persuaded to embrace the comprehensive approach to nuclear risk reduction advanced by many NGOs. The linkages among nonproliferation objectives, decisions on nuclear doctrine and policy, and arms control objectives were never accepted by political leaders. Government policy continued to be incremental, ad hoc, and piecemeal. The change in discursive policy at the time of the NPT's extension was not sustained by American leaders. Indeed, the credibility of these rhetorical reaffirmations of the United States' Article VI commitment appeared increasingly incredible in light of Washington's stubborn defense of doctrinal orthodoxy.

**Explaining the Campaign Outcome.**

In Keck and Sikkink’s study of transnational action networks, three factors appear particularly relevant to an explanation of the nuclear campaign’s relative successes and failures: (i) issue characteristics; (ii) target audience characteristics; and (iii) network characteristics. Additionally, the impact of a fourth factor—the broader international context—must also be considered, since global events influenced perceptions of the “issue” (nuclear elimination) as well as the relative vulnerability of "targets" (governments and
officials) to external pressure, and the type of, and relationship among, nongovernmental "actors" involved in the 1990s nuclear futures debates. This unique constellation of factors created formidable challenges for the nongovernmental community that were only partially overcome. Future NGO efforts to effect changes in nuclear policy should take into account these factors in order to maximize the prospects for a successful campaign.

**ISSUE CHARACTERISTICS.** The relative success of advocacy networks depends on their ability to "mobilize information strategically to help create new issues and categories and to persuade, pressure, and gain leverage over much more powerful organizations and governments." The ability of advocacy networks to "mobilize information strategically" depends of course on decisions about targets, means, and tools. But success or failure may also be dependent on the nature of the issue about which information is being exchanged and distributed. In Keck and Sikkink's study of transnational action networks, activists were more apt to be successful in transforming the terms and nature of debate and, even more, in influencing actual policy outcomes, if several conditions were met.

First, issues that involve matters of principle rather than technical issues may more easily find broader constituencies. For advocacy networks, "an important part of the political struggle over information is precisely whether an issue is defined primarily as technical—and thus subject to consideration by 'qualified' experts." For most of the Cold War, however, nuclear weapons issues were largely viewed as highly technical issues best left to "the experts." Decisionmaking authority had long ago been delegated to the "guardians of the arsenal" and the public shielded from the realities of US nuclear planning. The 1990s debates represented a democratic intrusion into the process that many in government did not welcome and many outside of government saw no need to support. Government officials dismissed NGO programs for change as politically naive, simplistic, and unrealistic—all due to being outside the “black box” of nuclear decisionmaking; the public largely accepted this view because it continued to view the nuclear problem as involving technical issues rather than matters of principle. An unresponsive White House and unresponsive public in this sense went hand in hand. NGO tactics may have contributed to the problem. The well-reasoned analyses of many experts’ reports may have been persuasive to other defense analysts but failed to engage publics because they intentionally avoided arguments that rested on moral judgements regarding the illegitimacy of nuclear weapons. Perhaps not coincidentally, the highpoint of public interest occurred following the testimonial of General Butler, who combined tales of first-hand experience with reasoned argument, backed by strong moral
conviction. The response to Butler's presentation of the argument for change suggests public interest in nuclear doctrine can be aroused if the issues are presented in ways that relate to people's lives and appear urgent. Yet, although Butler's approach resonated with a broader public and captured the media spotlight, it did not endear him to some Washington defense experts, highlighting the difficulties in reframing the nuclear issue in ways that both elites and publics will respond to favorably.

Second, the great uncertainty regarding past and future nuclear risks and benefits further complicated NGO efforts to persuade policymakers that diminished reliance on nuclear weapons would serve national interests and international security. The counter-reformers asserted that nuclear deterrence had “worked” during the Cold War and would be effective in future conflict scenarios; proponents of change countered that it was impossible to prove that the Soviet Union and Warsaw Pact had been deterred and that, moreover, there were no guarantees that the principles of bipolar deterrence would work in the emerging strategic environment. Neither claim could be proven, however. Similarly, embrace of nuclear elimination, even as a long-term goal, rested on certain projections regarding global trends in politics, economics, and technology that were unprovable. The difficulties associated with “thinking forward” were easily exploited by the counter-reformers, who took to juxtaposing the end-state—the achievement of a nuclear-weapon-free world—with current political conditions, in order to discredit the proponents of nuclear elimination. This conflation of current conditions with future policies was effective in weakening the case for zero, even though the majority of disarmament advocates recognized explicitly that the complete elimination of nuclear weapons could only be achieved if political conditions evolved in such a way that states would see it in their interest to marginalize and de-legitimize nuclear weapons.

Third, the risks associated with nuclear weapons may have appeared to many policymakers and publics as "structural" in origin, rather than the product of leaders' deliberate actions or decisions. If, as the realists argued, nuclear weapons derived their political and
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military utility from the structure of international politics (i.e. an anarchic, self-help system comprised of sovereign states)—and that structure was immutable—then states were compelled to acquire the most powerful military instruments available, or to ally themselves with those that already possessed them, if they were to secure their interests and survival. In this view, the risks of nuclear weapons were regrettable but they existed, and the struggle among nations left states little alternative but continued reliance on nuclear deterrence. Many government leaders and Western publics appear to accept this fatalistic view. In the United States, for example, many Americans express sympathy for the goal of a nuclear-weapon free world, but also believe that proliferation is inevitable and the disarmament objective therefore unattainable.159

Finally, nuclear weapons issues had no human face. Although more recently some activists have expressed interest in emulating the model of the global landmines campaign, there are fundamental differences between the two issues. Keck and Sikkink’s study of transnational action networks suggests that global advocacy campaigns are apt to be more successful when the issue involves bodily harm to individuals, especially young, innocent, or vulnerable populations, or when the issues involve legal inequalities or lack of opportunities.160 The risks associated with landmines were easily translated into powerful visual images that brought home to publics far removed from the problem the human costs of failing to eliminate these weapons; the same is not true of nuclear risks, however. Absent a catastrophic event—either a nuclear accident or deliberate nuclear use—nuclear risks remain abstract and intangible.161

TARGET CHARACTERISTICS. The ability of the nongovernmental community to influence nuclear policy also depended on certain characteristics of, and access to, campaign “targets.” In the case of nuclear weapons policy, access to the most senior political leaders was essential if bureaucratic inertia and resistance were to be overcome and anything more than incremental change achieved. Even if access could be achieved, however, there was no guarantee that NGOs would possess leverage over leaders and officials.

In the absence of public interest or pressure, policymaking elites in the United States and other Western countries proved relatively invulnerable to NGO pressures—except when such pressure was exerted in conjunction with foreign "assistance" (the “boomerang effect”) and with regard to key decision points. Thus, arguably the high-point of target vulnerability occurred in 1995-96, when the United States and other Western states were anxious to
achieve an extension of the NPT in the face of much resistance from the non-aligned and other non-nuclear weapon states. Similarly, NGOs also proved adept at using transnational networks and contacts to high-level foreign officials to bring pressure to bear on recalcitrant governments—including the United States—during the negotiations for the CTBT. Following the achievement of NPT extension and conclusion of a CTBT, however, the vulnerability of policymakers appeared to decline. With sporadic exceptions (CD plenaries and the PrepComs for the next NPT review conference), international attention turned to other matters. Growing tensions between Russia and the West, new public awareness of China’s nuclear capabilities, and the Iraqi and North Korean proliferation challenges may also have reduced the vulnerability of the US government to pressure, perhaps in the expectation that Americans would care little if Washington steered a cautious course during a time of uncertainty and possible new proliferation threats.

The most invulnerable targets proved to be political leaders at the highest levels of government. Many American NGOs had hoped in vain to persuade President Clinton to take bold new initiatives during his second term of office, if not as part of his “legacy” to future generations than to deal with growing nuclear dangers in Russia. Even absent the subsequent impeachment battle, it is questionable whether Clinton could have been persuaded to act on issues on which he was clearly diffident, particularly given his problematic relationship with the Pentagon. A forceful champion within the administration might have made a difference, but none was found. And without the involvement of or guidance from high-level political leaders, sympathetic officials within the bureaucracies were relatively powerless to effect changes in policy. What was true in the United States was later repeated in Britain and Germany as well. The new Labour government conducted what it termed a “fundamental” review of its defense strategy, but the final document essentially reaffirmed the government’s commitment to a scaled-down Trident force and otherwise undertook rather cosmetic changes. In Germany, the situation was reminiscent of the United States, where a new leader had been elected primarily on the basis of his domestic program and had little experience in security affairs. With unemployment hovering at or around ten percent, most German voters cared more about domestic economic and social issues; to the degree that they focused on foreign policy issues, it was with an eye to the uncertainties of European Monetary Union and the eastward expansion of NATO. In both European countries, governments found little public opposition to the nuclear status quo.
The relative invulnerability of political leaders and to insider tactics relates to the issue characteristics discussed above. When core national security issues are involved, policymakers generally expect to retain tight control over decisions and, as noted above, publics have been largely content to let them to do so. Although the NGO community was quite successful at using new communications technologies to create organizational networks, in the end, these technological tools allowed NGOs to more effectively circulate information amongst themselves but did not guarantee access to or influence over key target audiences, which may have continued to respond more to traditional tools of political pressure and leverage than to information piped through new electronic media.

**ACTOR CHARACTERISTICS.** The 1990s nuclear debates eventually came to encompass a wide range of nongovernmental entities that employed increasingly sophisticated communications and information technologies to share intelligence and coordinate their respective activities. The network came to include prominent individuals such as General Butler and former Secretary of Defense Robert McNamara, foundations, citizen advocacy groups and respected academic and policy research institutions in the United States, Europe, and Asia/Pacific. Over time, contacts among network members grew more frequent and routine. Information flowed regularly throughout the network, with participants in different countries posting to email list-serves articles and commentaries that they could easily access but which otherwise would not have been immediately available to their counterparts in other parts of the world. Experimental electronic discussion fora and conferences, as well as frequent seminars, meetings and conferences in Washington and other locations, further cemented the contacts among various NGO representatives. Connections among network members tended to divide into distinct clusters, however. Academic and policy research institutions maintained regular contact with each other and with certain policy advocacy organizations. Citizens’ action groups and grass-roots organizations cultivated contacts among their members as well, but the activist network tended to operate separately from the network of prominent pro-elimination spokespersons and research institutions.

This separation reflected, in part, the different audiences for each group’s respective activities, but was also a result of tactical calculations. Many policy research institutions and
prominent individuals involved in the nuclear elimination debates reasoned that their comparative advantage lay in their ability to gain access to governmental security elites and political leaders. Many early participants could, after all, justifiably claim to be members of the same policy elite that they were attempting to influence. Senior retired military commanders and former high-level civilian defense officials, in particular, hoped to leverage their experience, credibility, and contacts in government to influence policy outcomes. According to this reasoning, an association or alliance with grass-roots organizations calling for immediate global disarmament could be counterproductive to their aims. Put differently, a morality-based stance would have increased the magnitude of the reformers’ apostasy and devalued their expertise simultaneously. Yet, while the participation of security elites in the NGO campaign made it difficult for government officials to entirely ignore the calls for change, in the end, elite pressure alone proved insufficient to effect a doctrinal revolution. An interesting question for the future is whether elite or, alternatively, activist campaigns can be successful absent broader participation at the other level or whether effective partnerships between societal activists and elites are necessary before national security elites become truly vulnerable to external pressure.

The multiplicity of players and plethora of important issues and worthwhile objectives also complicated efforts of the NGO community to unite behind a single program. Electronic communications technologies for the first time gave NGOs and individuals the opportunity and means to disseminate information and to coordinate their respective activities. Consensus on priorities and strategies nevertheless remained difficult to achieve. Different segments of the nongovernmental community tended to focus on their particular audiences. Moreover, the political realities, both international and domestic, made difficult choices among competing objectives and approaches inevitable. Coordination across national boundaries was even more challenging, because perspectives on priorities and strategies often were colored by national, historical, and geopolitical factors.

INTERNATIONAL ENVIRONMENT. International events and domestic political conditions in the United States—the key target country—conspired against a more successful outcome. Persuading political leaders and policymakers to embrace a new approach to nuclear weapons depended critically on convincing them that such steps would not undermine
national security. Through mid-decade, international developments indeed suggested that nuclear weapons were losing some of their salience in international affairs. After 1996, however, cracks in the nonproliferation regime and political regression in Russia seemed to discredit elimination advocates’ arguments, instead creating favorable conditions for an effective counteroffensive by conservative NGOs. It did not seem to matter whether nuclear weapons logically were either effective or relevant to emerging threats. Rather, a sense of vulnerability to threat and danger probably made leaders and publics hesitant to undertake changes in policy that were themselves perceived to entail much uncertainty and risk. On the other hand, the deteriorating threat environment never reached the point at which nuclear risks became high priorities for elected officials or publics. Under these conditions, public support for new nuclear policies was difficult to rally.

THE PROSPECTS FOR FUTURE NGO NUCLEAR ACTIVISM

For the past decade, the nongovernmental community in the United States and other countries has played a critical role in initiating and sustaining a debate about the future of nuclear weapons and the relative risks and benefits of working to create a nuclear-weapon-free world. Together, many academic and policy research institutions have produced a rich body of proposals and analyses related to the path toward nuclear elimination, while prominent private citizens and advocacy organizations have endeavored to educate publics and policymakers about new and old nuclear risks. But the best efforts of these individuals, groups, and networks have so far failed to effect real change in the policies or actions of the United States and other nuclear weapon states or to arouse public interest in the problems created by the Cold War nuclear legacy and emerging nuclear dangers.

A firm foundation for future efforts to advance a new approach to nuclear weapons exists.

At the current juncture, a seeming impasse appears to have been reached in the debate about alternative nuclear futures, with very little headway being made toward bridging the differences between proponents and opponents of a fundamentally new approach to addressing Cold War nuclear legacies and emerging nuclear dangers. Although the complete elimination of all nuclear weapons is now considered a legitimate topic of discussion and serious analysis, in the current international environment, the debate no longer appears meaningful, and the political advantage has shifted to those favoring continued, rather
than reduced, reliance on nuclear weapons.

Moreover, opposition to a radical rethinking of the political and military value of nuclear weapons remains formidable. Within the US Department of Defense, there are pressures for a more expansive role for nuclear weapons either to deter or to respond to threats or attacks with chemical and biological weapons. The national weapons laboratories also emphasize the continued need for nuclear weapons and the risks associated with deep reductions or the complete elimination of nuclear weapons. Administration officials routinely reiterate the United States’ commitment to fulfillment of its Article VI obligations, but they also state clearly that “the United States must and will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with access to strategic nuclear forces from acting against our vital interests and to convince it that seeking a nuclear advantage would be futile.”

In the near-term, the agenda is likely to be driven by the dangers emanating from Russia and other regions of proliferation risk. Additionally, the political fallout from the conflict over Kosovo could further dim prospects for nuclear risk reduction. Many Russian and American observers believe that political relations between the two countries are at a crucial turning point. While few predict a return to the intense competition of the Cold War, domestic political opposition to cooperation in both countries could be mutually reinforcing, making it very difficult for either government to undertake new initiatives in this area or even to sustain existing nuclear risk reduction programs.

Despite this gloomy picture, a firm foundation for future efforts to advance a new approach to nuclear weapons exists. First, despite widely divergent views on the desirability and feasibility of eventually eliminating all nuclear weapons, there appears to be broad-based support for further reductions in US and Russian nuclear arsenals. Second, recognition appears to growing that in the post-Cold War world, innovative mechanisms and measures are needed to address the full panoply of nuclear risks and dangers. Third, both proponents and opponents of change in US nuclear policy share a growing concern about the proliferation of weapons of mass destruction, although they prescribe very different solutions to the problem. Further, national and transnational networks of NGOs that are committed to a new approach to nuclear weapons communicate and exchange information on a regular basis. Although many groups remain divided over priorities and next steps, the possibility of building a community across national boundaries, united behind a common program, remains a near
term prospect. In Japan, Canada, and Europe, NGOs have expressed interest in exploring the possibility of launching a civil society campaign, modeled after the landmines campaign, to achieve the phased elimination of nuclear disarmament. There are of course significant differences between the two issue areas, and the experience of the last decade suggests that the landmines example will not be easily emulated. Critical to such a campaign would be careful consideration of whether the preconditions for success are extant or likely to emerge.

In the meantime, the uncertainty and fluidity of the global strategic environment will continue to raise questions about the usefulness of traditional policies and approaches to nuclear weapons. Such uncertainty may cause leaders to err on the side of nuclear orthodoxy; it may also create unique opportunities for proponents of change, however. In a period of "profound global flux," Keck and Sikkink observe, "foreign policymakers are often uncertain not only about what the national interest is, but also about how best to promote it." Under these circumstances, networks of NGOs can serve as carriers of new ideas and principles, "inserting them into the policy debate at crucial moments when policymakers [are] questioning past policy models."66 The lesson for the nongovernmental community is clear. NGOs seeking to achieve a true paradigm shift in the approach to nuclear weapons must be prepared to exploit such "crucial moments" whenever they occur. Unfortunately, it may take a catastrophic shock, such as a nuclear detonation or serious nuclear accident, to create such a crucial moment and shake publics and political leaders out of their complacency.


10. Simmons, 85; Gordenker and Weiss, 18-21; Spiro, 45; and Clark, 512-13.

11. Different instruments will of course serve different NGO objectives. For example, to draw attention to a problem, NGOs may organize meetings, hearings, and conferences about issues that heretofore have not been matters of public debate. If the objective is to advance a particular agenda, reports and other publications may be used to inform public debate or to inject new ideas into the internal policymaking process. One particular type of NGO – foundations – offers financial support to advocacy organizations or research institutions that in turn employ the tools described above to achieve shared objectives.

12. During the 1990s nuclear debates, for example, a number of institutions assumed responsibility for coordinating the activities of groups of NGOs, a task facilitated by the diffusion of advanced electronic communications technologies (principally email and the World Wide Web) that for the first time allowed geographically-dispersed organizations to communicate and exchange information on a timely and frequent basis at relatively low cost. For example, the Henry L. Stimson Center coordinated the Campaign for the NPT Treaty and, initially, the Coalition to Reduce Nuclear Dangers, responsibility for which was subsequently transferred to the Council for a Livable World Education Fund. Similarly, the NGO Committee on Disarmament has for over twenty years coordinated the activities of hundreds of smaller citizens groups around the world. Abolition 2000, a loosely organized coalition of over 1,000 grass-roots organizations around the world, is coordinated by the Nuclear Age Peace Foundation.

13. Clark, 518.

14. On the potential contribution of network analysis to an understanding of transnational cooperation among NGOs, see Gordenker and Weiss, 34-36.

15. Keck and Sikkink, 6-7.

16. Ibid., 2.

17. Ibid., 6.

19. An additional objective pursued by many NGOs but not included in Keck and Sikkink’s scheme is participation in the implementation of policies. On some issues, NGOs may actually be involved in the implementation of policies decided by states or international intergovernmental organizations (IGOs). This is particularly true in the case of complex humanitarian disasters, where cooperation among NGOs, IGOs, and governments to respond to emergencies and provide services has become common. This objective probably has little relevance, however, to nuclear weapons issues.

20. Keck and Sikkink, 27.

21. Ibid., 21.

22. Jeffrey Knopf’s study of domestic protest movements and US arms control policy offers additional insights on this point. Knopf describes three distinct mechanisms used by NGOs to achieve their desired policy effects. The first mechanism involves the mass mobilization of public opinion and protest to create electoral pressures on candidates and incumbents. The second, which he terms “elite coalition shift,” necessitates an alliance of elites, both in and outside government, that in turn triggers Congressional action on behalf of preferred arms control objectives. The third path, “bureaucratic utilization,” requires that external advocates cultivate access to officials inside governmental bureaucracies who are sympathetic to their goals, thereby injecting new ideas into the internal bargaining process. See Jeffrey W. Knopf, *Domestic Society and International Cooperation: The Impact of Protest on US Arms Control Policy*, Cambridge Studies in International Relations (Cambridge: Cambridge Univ. Press, 1998), 53-78.

23. Keck and Sikkink, 28. In this sense, advanced communications technologies can be “force multipliers” for NGOs, because they can facilitate reliable and rapid communication among large numbers of NGOs separated by both time and distance. Better communication, however, may not necessarily translate into effective cooperation and collaboration if NGOs do not share similar objectives and priorities.

24. Ibid., 2-8.

25. In their introductory discussion of TANs, Keck and Sikkink note that advocacy networks "promote norm implementation," 3.


28. The START I treaty, which entered into force in December 1994, requires the United States and Russia to reduce their strategic nuclear forces to 150 warheads each by December 1997 and to 7,950 warheads by December 1999. For the text of START I, see http://www.acda.gov/treaties/start/starttex.htm.

29. The concept of nuclear disarmament of course was not new, but few respected analysts were prepared to entertain the notion seriously as long as the United States and Soviet Union remained locked in rivalry. President Ronald Reagan had reintroduced the notion of a nuclear-weapon-free world in his March 1983 speech launching the Strategic Defense Initiative. Three years later, Gorbachev tabled the idea at the 1986 Reykjavik summit, causing most Washington experts to shake their heads in bemused surprise.


34. Not surprisingly, many in the American defense community disagreed fundamentally with Aspin’s thesis. Only four of the seventy-seven respondents explicitly endorsed pursuit of the complete elimination of nuclear weapons; the majority considered the goal both undesirable and infeasible. Many also took issue with Aspin’s thesis of the diminishing utility of nuclear weapons to the United States, but were willing to contemplate reductions to Aspin’s projected force level of 2,500 warheads each for the Soviet Union and United States.


41. Six areas were reviewed: (i) the role of nuclear weapons in US security strategy; (ii) US nuclear force structure, including the requirements for specific missions; (iii) nuclear force operations; (iv) nuclear safety and security; (v) the relationship between the US nuclear posture and counterproliferation policy; and (vi) the relationship between the United States’ nuclear force posture and threat reduction policy in the former Soviet Union. See “Memorandum from the Secretary of Defense,” 5 November 1993.


43. “The Pentagon’s Nukes you Can’t Lose,” US News & World Report, 8 August 1994, 34. Several factors appear to have played a role in the review’s outcome. First, the housing of the review in the Department of Defense worked against radical alternatives; presidential involvement probably would have been necessary to produce recommendations for more radical changes. Second, the leadership at the Department of Defense changed in early 1994, when William Perry, who proceeded to restructure the effort, replaced Les Aspin. Rather than producing a comprehensive policy document, as reportedly had been the intention, decisions were taken piecemeal and over time. The focus of the review also shifted from consideration of fundamental long-term issues to the provision of near-term guidance for the size and structure of the US arsenal. See “Uncertainty Over Russia Clouds U.S. Nuclear Strategy,” Defense News, 20-26 June 1994, 38; and “The Pentagon’s Nukes You Can’t Lose.”


46. In fact, concern about the proliferation of nuclear weapons appears to have been a primary motivation for many NGO efforts. Actions by the United States and Russia to reduce their nuclear arsenals, the CISAC report argued, were vital because the commitment of non-nuclear states to collective nonproliferation efforts "will surely depend at least in part on impressions about whether the nuclear weapon states are working seriously on the arms reduction part of the global nonproliferation bargain." See *The Future of U.S. Nuclear Weapons Policy*, 3.

47. The Deep Cuts Study Group, coordinated by Frank von Hippel at Princeton University, proposed a three-stage program of reductions from 2,000 to 1,000 to 100 warheads each for the all nuclear weapon states, to be accompanied by a program of safeguards and transparency measures, as well as de-alerting and dismantlement provisions. See Deep Cuts Study Group, Princeton University, "Executive Summary," *A Strategy of Staged Reductions and De-Alerting of Nuclear Forces*, 1996; and Frank von Hippel, "Paring Down the Arsenal," *Bulletin of Atomic Scientists*, vol. 53, no. 3 (May/June 1997), 33-40.

48. The Committee rejected the terms "elimination" and "abolition" because it did not believe that the world could ever be "free from the potential reappearance of nuclear weapons and their effects on international politics." p. 9. The most that could be accomplished, the Committee reasoned, was the "prohibition" of nuclear weapons, which it understood to mean a regime for comprehensive nuclear disarmament that was imbedded in an international security system that would make cheating unlikely.


50. In addition to Goodpaster, who chaired the Stimson committee, three other senior retired US military commanders endorsed the Stimson report: General Charles Horner, USAF (ret.), commander of allied air forces in the 1990-91 Persian Gulf War; Maj. General William F. Burns, USA (ret.); and General William W. Y. Smith, USAF (ret.), former Deputy Commander, US Command, Europe. Also participating in the CISAC study were General Lee Butler and Rear Admiral Robert H. Wertheim.


54. Butler, "The Risks of Nuclear Deterrence."


56. William Pfaff, "It is time to give up the bomb," *Baltimore Sun*, 23 December 1996.


60. A decision taken at the second PrepCom allowed NGOs to attend subsequent PrepComs and the 1995 extension conference and gave them the right to receive and submit documents at their own expense, as well as to brief delegates. The Secretariat also arranged morning briefings for NGOs. See Rebecca Johnson, *Strengthening the Non-Proliferation Treaty: Decisions Made, Decisions Deferred*, ACRONYM No. 4 (September 1994). The following research institutes and NGOs participated: The Acronym Consortium; Appel des Cent; British American Security Information Council; Campaign Against Militarism; Campaign for the Non-Proliferation Treaty; Campaign for Nuclear Disarmament; Center for War, Peace and the News Media; Defense and Arms Control Studies Program; Economists Allied for Arms Reduction; Foundation for Research on National Development and Security; Franciscans International; Friends World Committee for Consultation; Greenpeace International; Institute for Science and International Security; International Law Association; International Network of Engineers and Scientists Against Proliferation; International Peace Bureau; International Physicians for the Prevention of Nuclear War; Lawyers Alliance for World Security; Lawyers' Committee on Nuclear Policy Inc.; Les Verts; Monterey Institute for International Studies; Le Mouvement de la Paix; National Peace Council; Nei til Atomvapen; NGO Committee on Disarmament, Inc.; Nuclear Age Peace Foundation; Nuclear Control Institute; Nuclear Energy Institute; Oxford Research Group; Pan African Reconciliation Council; Parliamentarians for Global Action; Pax Christi International; Peace Action Education Fund; Peace Research Institute Frankfurt; Programme for Promoting Nuclear Non-Proliferation; Rockefeller Brothers Fund; Scientists for Global Responsibility; Swedish Peace Council; Transnational Institute; UNIDIR/Mountbatten Centre for International Studies; The Uranium Institute; War Resisters' International; Washington Council on Non-Proliferation; Western States Legal Foundation; Women's International League for Peace and Freedom; World Federalist Movement; World Federation of Democratic Youth; World Peace Council; and the World Veterans Federation.
61. The NPT’s extension was accompanied by the approval of certain “principles and guidelines,” intended to strengthen the treaty review process and assure greater accountability on the part of the nuclear weapon states. The simultaneous accession to the treaty’s extension and approval of the guidelines represented a carefully crafted compromise designed to ensure the treaty’s continued life and yet pay heed to the concern of many non-nuclear weapon states that the nuclear powers, having secured the treaty’s extension, would ignore their obligations. For the text of the “Principles and Objectives for Nuclear Non-Proliferation and Disarmament,” see Appendix III to Rebecca Johnson, “Indefinite Extension of the Non-Proliferation Treaty: Risks and Reckonings,” in Acronym Report no. 11, http://www.gn.apc.org/acronym/a11app3.htm.

62. For general information on the NGO Committee on Disarmament, see http://www.peacenet.org/disarm/about.html. For an overview of the symposia speakers and topics, see http://www.peacenet.org/disarm/forum.html.


64. Los Alamos, Lawrence Livermore and Sandia National Laboratories.


71. Gaffney, “General’s view is naive.”


73. Ibid., 22.

74. Habiger.

75. If Russia were allowed to cheat on START restrictions without detection, some argued, it might acquire sufficient capabilities to suddenly "break out" of the regime, posing a serious security threat to the United States. For highly critical views of reductions in US arsenals see “High-Level Roundtable Discussion Reveals U.S. Nuclear Deterrent’s Credibility, Reliability Imperiled,” Center for Security Policy Press Release, 25 August 1997 and See Kathleen Bailey, Statement Before the Senate Subcommittee on Strategic Forces, Senate Armed Services Committee, 31 March 1998.

77. Joseph, “Nuclear Deterrence and Regional Proliferators.”

78. Payne, 30.


81. Payne, p. 25.


92. Article VI of the nuclear Non-Proliferation Treaty obligates the states Parties 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.” For the text of the treaty, see http://www.acda.gov/treaties/npt1.htm#2.
93. John D. Holum, “Remarks to an International Seminar on Nuclear Disarmament After the Indefinite Extension of the NPT,” Kyoto, Japan, 2 December 1996, http://www.acda.gov/speeches/holum/hol.htm. The rhetoric was sustained in 1996, as the administration sought to complete a CTBT. For example, in his address to the United Nations on September 24, 1996, just after signing the CTBT, Clinton lauded the pact as a step “toward a century in which the roles and risks of nuclear weapons can be further reduced, and ultimately eliminated.” See White House Press Release, “Remarks by the President in Address to the 51st General Assembly of the United Nations,” 24 September 1996.

94. See Johnson, “Indefinite Extension of the Non-Proliferation Treaty.”


96. The treaty will only enter into force if all of the states listed in Annex 2 of the Treaty (including North Korea, India, Pakistan, and Israel) have ratified. If the accord has not entered into force three years after the anniversary date of the pact’s opening for signature, a majority of those states that have ratified may convene a conference to consider steps to facilitate the treaty ratification process. See Rebecca Johnson, “A Comprehensive Test Ban Treaty: Signed but not Sealed,” Acronym Report, no. 10, http://www.gn.apc.org/acronym/acro10.htm.


102. Smith of the Washington Post reported that the principal drafting was done by the then acting assistant secretary of defense for international security, Franklin Miller. See Smith, “Clinton Directive Changes Strategy.”

103. In his study of domestic protest and US arms control policy, Knopf distinguishes between two general types of goals or policy effects sought by NGOs. "General" policy effects refer to the priority accorded arms control objectives among national goals and interests and the scope of those objectives (far-reaching changes versus minor policy adjustments). "Specific" policy effects refer to detailed arms control objectives, for example, specific constraints on certain weapon categories or operational activities. The first category thus describes the "place of arms control on the national agenda" and the second, the arms control agenda itself. See Knopf, 52-53.


119. The consortium then comprised the Verification Technology Information Centre (VERTIC), the British American Security Information Council (BASIC), the International Security Information Service (ISIS), and Dfax.

120. For general information on VERTIC, see http://www.fhit.org/vertic/. The relevant publications include: Patricia M. Lewis, Laying the Foundations for Getting to Zero: Verifying the Transition to Low Levels of Nuclear Weapons; Tom Milne and Henrietta Wilson, Verifying the Transition from Low Levels of Nuclear Weapons to Zero; George Paloczi-Horvath, Virtual Nuclear Capabilities and Deterrence in a World Without Nuclear Weapons; and Suzanna Van Moyland, Sustaining a Verification Regime in a Nuclear Weapon-Free World. For information on PPNN, see http://www.soton.ac.uk/~ppnn/.


131. In August 1996, Asahi Shimbun, the city of Hiroshima and Hiroshima Peace Culture Foundation sponsored a conference on "A Step Toward a Nuclear-Free World." One year later, the Hiroshima Peace Institute held its inaugural conference on global disarmament issues.


136. For more information on the Committee, see http://www.stimson.org/policy/index.html.


138. Jonathan Schell, The Gift of Time: The Case for Abolishing Nuclear Weapons Now (New York: Metropolitan Books, 1998), 214. Although Schell's book was not published until after the disarmament wave had peaked, Schell noted that the idea for his book came in the fall of 1995—when momentum was building to a "critical mass."

139. Schell, 213-14.


142. The other members of the coalition were Brazil, Egypt, Mexico, New Zealand, Slovenia, South Africa, and Sweden.

143. For the text of the resolution and a summary of the debate, see Rebecca Johnson, “First Committee Report,” *Disarmament Diplomacy*, issue no. 31 (November 1998), 12-33.


145. Ibid., 1.

146. Ibid., 8-9.

147. Ibid., 49.

148. Ibid., 54.

149. For a complete list of the Committee's fifteen recommendations, see http://www.parl.gc.ca/InfocomDoc/36/1/FAIT/Studies/Reports/faitrp07/15-rec-e.htm.


152. Washington reportedly warned Bonn and other allied governments that a public debate on NFU would be viewed with "substantial concern" and that it would be "non-productive and damaging." Quoted in Stephen Young, "Nuclear Doctrine Remains Thorn in NATO's Side," BASIC Reports, 24 February, 1999. Although Canada and some of the smaller European countries reportedly were sympathetic to Germany's position, others apparently preferred to avoid new debates on nuclear policy. See Mark Mathews, "NATO Nuclear Rift Widens. Session Finds Bonn Gaining Allies Against U.S. First-Use Policy," Baltimore Sun, 9 December 1998. In the end, Joschka Fisher reportedly wrote Madeleine Albright, confirming that Germany would not raise the nuclear issue at or before the April NATO summit. See "Fischer Sends Letter to Albright on NATO Nuclear Strikes," Der Spiegel, 22 March 1999, 17, FBIS translation, see http://www.nautilus.org/nnnet/news/032299spiegel.txt.

153. Dutch Foreign Minister Jozias van Aartsen reported in a March 1999 letter to the Dutch lower chamber that he had opposed radical changes in NATO's nuclear policy at this juncture, and instead proposed that new language be drafted that emphasized the reduction in alliance nuclear holdings and underscored that the likelihood of NATO resorting to nuclear weapons was "extremely remote." "Dutch Foreign Minister Letter Explains Nuclear Policy to Parliament," 12 March 1999, http://www.nautilus.org/nnnet/references/aartsen031299.txt. This phrasing was echoed in the final document. For a more sympathetic view of the German proposals, see the commentary by Martin Woollacott, "Shrines to Destruction," The Guardian, 28 November 1998.

154. See comments by Defense Minister George Robertson at a hearing on NATO's Strategic Concept before the House of Commons Defence Select Committee, 17 February 1999, http://www.nautilus.org/nnnet/references/UKDefCom021799.txt. Robertson also confirmed that the Germans had agreed not to bring up NFU at the summit.


156. Moreover, the ultimate impact of activities directed toward raising the profile of nuclear issues may not yet be evident. Some of the studies undertaken by the nongovernmental community have been integrated into university texts and reading packets or otherwise incorporated into the body of literature that will help to shape future perspectives on the roles and risks associated with nuclear weapons.


158. Ibid., 19.


160. Keck and Sikkink, 27.

161. The notable exception of course is the population of Japan, which has grown up with images of Hiroshima and Nagasaki victims, a visual heritage that may help to explain pro-disarmament public sentiment in Japan.
162. Grass-roots organizations, on the other hand, concentrated their efforts on generating citizen support for nuclear disarmament, but lacked access to US policymakers. Advocacy groups tended to focus their energies on winning important political battles as they emerged on governmental agendas, first NPT extension, then CTBT negotiation, followed by CWC ratification, etc. The three strands of NGO activity, in the end, proved both a strength and a weakness. The implicit division of labor reflected different organizations' comparative strengths and their ties to different audiences. Yet it is worth asking whether more might have been accomplished had the three tracks intersected more frequently.

163. In his study of citizen protest movements and US arms control policy, Knopf suggests that leverage is maximized when grassroots campaigns are able to pair with effective elite partners, who can gain access to and influence key national security decisionmakers, 252-63.

164. A 1993 report commemorating the fiftieth anniversary of Los Alamos National Laboratory stated categorically: “Nuclear weapons will not disappear and deterrence remains an essential element of U.S. national security.” While acknowledging that changes in the former Soviet Union had made possible reductions in both countries’ strategic nuclear forces, the report stated: “The United States must continue to have a credible nuclear capability for the foreseeable future, given the reality of continued nuclear weapons deployment by several other nations.” Los Alamos Science, no. 21 (1993), 44. See also Robinson and Bailey, “To Zero or Not to Zero;” and the collaborative effort of the Lawrence Livermore National Laboratory and the National Defense University, U.S. Nuclear Policy in the 21st Century: A Fresh Look at National Strategy and Requirements.


166. Keck and Sikkink, 119.
## Appendix 1

**Proposals for the Elimination of Nuclear Weapons and Alternative Endstates (select)**

<table>
<thead>
<tr>
<th>Phase</th>
<th>STEPS</th>
<th>STRATEGIC ENVIRONMENT</th>
</tr>
</thead>
</table>
F, UK, PRC: join reductions below levels of 1,000  
End all modernization of nuclear weapons; conclude CTBT and fissban  
Reinforcing measures: reduce motivations to use force; seek to achieve UN Charter objectives; establish interational rule of law | Reductions to mimium deterrent level possible in current strategic environment; elimination will require reducing motivations to use force |
| **CSIS Nuclear Strategy Study Group, A Nuclear Peace: The Future of Nuclear Weapons in U.S. Foreign and Defense Policy (June 1993)** | US and Russia: reduce to 1,000 warheads each, then to 500-1,000; consider ban on tacnukes; and reduce operational tempo  
US: discuss non-operational nuclear forces with declared NWS; discuss total ban on tacnukes and NFU pledge with NATO  
UK, F, PRC: agree to restrict arsenals to 200 operational strategic warheads  
Treaty banning first-use of nuclear weapons | Anarchic international system, in which NWs may help to keep peace; extended deterrent role for NWs; US nuclear policy based on MAD; bilateral nuclear balance  
Russian government willing to cooperate in arms control |
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<tr>
<th>PHASE</th>
<th>STEPS</th>
<th>STRATEGIC ENVIRONMENT</th>
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</table>
| II    | Move to “endstate.” Alternative endstates include:  
C non-operational nuclear forces  
C international nuclear force  
C complete and total disarmament | End to anarchic international system; “considerable progress” toward rule of law in international affairs  
Major states no longer view nuclear weapons as necessary to deter war, enjoy friendly relations, and have faith in conflict resolution system.  
May require: movement toward representative democracy in major states; robust international organizations; effective dispute resolution and crisis management mechanisms; robust security guaranties; stiff penalties/sanctions for resort to war |

General Andrew J. Goodpaster, Atlantic Council, *Further Reins on Nuclear Arms* (August 1993)

| I     | US and Russia: reduce to 1500-2000 total warheads each  
Five declared NWS: adopt NFU policies  
Reinforcing measures: build highly-capable detection mechanisms; assess interim level of 200 for all NWS; Mideast peace efforts; agreement on positive security assurances; discussion of enforcement mechanisms, fissban, CTB; study desirability/feasibility of global ban on land-based ICBMS | START ratification  
Denuclearization agreements between Russia & Ukraine  
Russian progress toward democratization, internal stability, non-confrontational foreign policy |

| II    | Five declared nuclear weapon states: reduce stockpiles to 100-200 warheads each  
Agreement to reassess/halt reductions if “rogue” NW program detected  
Israel, India, Pakistan: agree to ceiling of 200 warheads and commit to NW only as “defensive last resort”  
Acceptance of START verification procedures | Cooperative security environment among industrialized democracies, including Japan and Germany  
Continued Russian progress toward democratization, internal stability  
Strengthened non-proliferation regime |
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<th>PHASE</th>
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<th>STRATEGIC ENVIRONMENT</th>
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| III   | Abolish and eliminate all nuclear weapons:  
High-confidence procedural safeguards and response capabilities against proliferation, breakout, clandestine cheating  
Additional NWF zones  
Monitored ban on nuclear testing and on production of weapons-grade nuclear materials  
Elimination of land-based ballistic missiles; tactical ballistic missile defense as safeguard against breakout/cheating | Rigorously enforced nonproliferation regime                                                                                                                                                                                                                                                                                                                                                                       |

**Gorbachev Foundation (Moscow/USA) and Rajiv Gandhi Foundation, Global Security Programme (October 1994)**

<table>
<thead>
<tr>
<th>PHASE</th>
<th>STEPS</th>
<th>STRATEGIC ENVIRONMENT</th>
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| I     | US and Russia: make START reductions irreversible; undertake exchange & bilateral or multilateral monitoring of warhead stocks and fissile material for weapons; reduce deployed weapons drastically; undertake obligatory dismantling of reduced nuclear warheads and store fissile material under multilateral supervision; destroy missiles reduced by agreement; on deployed systems, separate warheads from delivery systems and store under international monitoring  
Global fissban |                                                                                                                                                                                                                                                                                                                                                                                                     |
| II    | US and Russia: reduce to ~1,000 warheads each; bring in UK, F, & China for further reductions; bilateral measures agreed in phase I extended to other declared NWS                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                     |
| III   | Declared NWS: reduce arsenals to ~100 warheads each; separate remaining warheads from delivery systems; place warheads and delivery systems under multilateral control on owner state’s territory  
T-3: give up fissile materials or place in monitored storage on own territory | Strengthened IAEA and robust verification regimes  
Adequate safeguards over nuclear capabilities of all UN member states  
UNSC mechanisms to punish violators of NW ban                                                                                                                                                                                                                                                                                                                                                                       |
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<th>PHASE</th>
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<tr>
<td>Final</td>
<td>Further reductions to “scores,” then elimination of NWs</td>
<td>Effective international security system</td>
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**Jonathan Dean, *The Final Stage of Nuclear Arms Control* (1994)**

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<th>PHASE</th>
<th>STEPS</th>
<th>STRATEGIC ENVIRONMENT</th>
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<tr>
<td>I</td>
<td>US &amp; Russia: create system for monitoring warhead and fissile material stocks; exchange data on current fissile material and warhead holdings (deployed and stored); agree to dismantle all strategic weapons reduced under START and withdraw tacnukes unilaterally; agree not to reuse fiss material for weapons; transfer fissile material to bilateral or IAEA-monitored storage or combination; agree to destroy all withdrawn missiles and end missile production; movement toward zero alert</td>
<td></td>
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<tr>
<td>II</td>
<td>US &amp; R: ratify START II or replacement agreement; agree to make reductions to 1,000 irreversible</td>
<td>Successful resolution of Ukrainian and North Korean problems</td>
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UK, F, PRC agree to: freeze holdings or reduce 10 percent; 5-pwr monitoring of stored warheads and fissile material; data exchange; dismantle reduced warheads and missiles; transfer fissile material to monitored custody; move toward zero alert; reduce levels of stored fissile materials; halt weapons production; transfer Pu (civilian) to IAEA custody

Global: CTBT, fisban, extension of NPT
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<th>PHASE</th>
<th>STEPS</th>
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<td>III</td>
<td>“Neutralization” of remaining arsenals: P-5 agree to reduce to 200 warheads each; separate warheads from delivery systems &amp; place under multilateral control on national territory; place weapons-grade fissile material and remaining stocks under international monitoring; agree to further reductions T-3: choose between placing warheads or explosive devices and fissile material in monitored storage</td>
<td>Successful implementation of 2 earlier stages Strengthening of IAEA International agreement to end use of Pu as fuel for energy</td>
</tr>
<tr>
<td>IV</td>
<td>Elimination or transfer of remaining warheads to UN-like authority</td>
<td>Functioning global security system: proven &amp; dependable global and regional security institutions; non-nuclear alternatives to deter conventional and nuclear war among major powers; states no longer regard NWs as ultimate guarantee of security Robust &amp; effective nonproliferation regime Functioning, stable governments in Russia and in China</td>
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<p>| I | Establish international security regime that would address security concerns of all states and seek to create independent UN nuclear deterrent force to replace all national nuclear forces: formalize regime International Security Treaty; establish International Nuclear Authority (INA) to oversee treaty; create international controls on nuclear energy and accounting system for all nuclear materials and warheads; conclude START III treaty among all nuclear powers; dismantle all nuclear warheads and place material under international control | High levels of transparency Stronger norms and institutions: greater respect for international law; effective international organizations; strong norm of non-use; confidence in UN system; great power cooperation; declining unilateral military intervention; perhaps a “deepening of democracy”; security alternatives to deal with perceived threats |</p>
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<tr>
<td>Ia</td>
<td>Global: treaty on negative security assurances; positive security assurances obligating international community to take joint action against state or group that uses NWs first; use of military force abroad restricted to actions designed to support UNSC resolutions NWS: eliminate “excess” nuclear forces CTBT or commitment to stop testing</td>
<td>Revitalized UN Security Council system: cooperative security regime; transparency; constraints on arms transfers</td>
</tr>
<tr>
<td>Ib</td>
<td>International control and inspection of all nuclear activities and fissile material</td>
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<tr>
<td>Ic</td>
<td>Prohibition on military intervention except when sanctioned by UNSC; strengthened prohibition of CBW</td>
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<tr>
<td>II</td>
<td>Create International Nuclear Deterrent Force comprised of ~100’s of warheads; INDF coexists with national nuclear arsenals but gradually takes over roles of these arsenals (positive nuclear security guarantees)</td>
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<tr>
<td>IIa</td>
<td>NWS dedicate portion of nuclear forces to INDF</td>
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<tr>
<td>IIb</td>
<td>Weapons, military and intelligence structures transferred to INA and UNSC INDF provide security guarantees to NNWS; national nuclear forces used only to deter attack on possessor countries or to support NNWS if INDF unable to act</td>
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<tr>
<td>III</td>
<td>Abolition of national nuclear arsenals: reduce national nuclear arsenals system to ~250 warheads; place national nuclear warheads under international control so that they are invulnerable to attack by covert nuclear forces; cooperative world security order</td>
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<th>PHASE</th>
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<tr>
<td>Immediate</td>
<td>Reduce nuclear arsenals; moratorium on nuclear tests; CTBT; test ban for Bms; NFU Treaty &amp; treaty to ban use and threat of use of NWs; Full implementation of CWC and verification system for BWC; UN register of conventional arms and UN reports on military expenditures; Close &amp; dismantle NW production facilities; global moratorium on further production/development of NWs; production cut-off of weapon-grade fissile material; improved safeguards/monitoring system for all nuclear facilities</td>
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<tr>
<td>Intermediate</td>
<td>Declared NWS: undertake deep reductions; remove nuclear warheads from missiles &amp; place in national storage under international inspections; Constraints on NW deployments in NNWS; NWFZs in Africa, SE Asia, other regions; International inventory of fissile material</td>
<td></td>
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<tr>
<td>Final</td>
<td>“Transformation” of NWS into NNWS: dismantle remaining nuclear arsenals under international inspection; international control of all fissile material; ban on national uranium enrichment and spent fuel reprocessing facilities; Global Nuclear Weapons Convention</td>
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</table>
| I     | Declared NWS: commit seriously to long-term objective of eliminating all nuclear weapons  
US and Russia: implement START II; reduce to ~ 2,000 warheads each; discuss nonproliferation, nuclear safety and security and arms control objectives w/ UK, F, PRC; reduce readiness levels; increase cooperation on nuclear safety and security  
US: limit nuclear roles to deterrence of other nuclear threats; support actions to reduce prestige attached to NW (UNSC reform); support fissban negotiation; study of verification of elimination; safeguards against break-out; implications of phased elimination for allies, conventional forces; & potential role of defensive systems | US and Russia able to cooperate to reduce nuclear dangers  
Progress toward eliminating CBW  
Progress toward eliminating CBW for NBC weapons |
|       | UK, France, China, T-3: undertake no action to undermine non-proliferation regime  
Reinforcing policies: build strong cooperative relationship with Russia; promote cooperation w/ China and in Asia | Stable and cooperative relations among declared nuclear weapon states; deterrence plays marginal role in relations  
Discuss cooperative deployment of defensive systems; begin to address T-3 capabilities |
| II    | Declared NWS: reduce arsenals to 100s of NWs each; remove most NWs from active alert status; accept nuclear transparency measures; discuss cooperative deployment of defensive systems; begin to address T-3 capabilities  
Reinforcing policies: measures to address security concerns of T-3 and other states in conflict regions; build or strengthen regional and international organizations; strengthen global non-proliferation regimes for NBC weapons | Robust non-proliferation regimes for NBC weapons  
Significant progress toward conflict resolution in Europe and Asia  
Significant progress toward conflict resolution in Europe and Asia  
Value of NWs as status symbols greatly diminished for NBC weapons |
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<tr>
<td>III</td>
<td>NWS: reduce to 10s of weapons; then create international “trustee” system OR create integrated multilateral nuclear force through pooling of remaining NWS’s arsenals</td>
<td>States remain sovereign</td>
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<td>Reinforcing policies: strengthen regional organizations; strengthen conflict prevention and resolution mechanisms</td>
<td>NWs’ only role to respond to unexpected threat of mass violence</td>
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<td></td>
<td>Highly intrusive verification regime</td>
<td>Functioning and reliable collective security regimes</td>
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<td></td>
<td>High levels of transparency &amp; effective enforcement mechanisms</td>
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<tr>
<td>IV</td>
<td>Eliminate nuclear weapons; preserve reconstitution capability under international safeguards</td>
<td>State system with effective security alternatives to threat of mass violence; may require spread of democracy</td>
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<td>National and international verification regimes capable of detecting violations of NWs’ ban in a timely manne; effective safeguards against potential violators</td>
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<p>| Immediate | Declared NWS: commit unequivocally to pursue elimination; de-alert; remove warheads from delivery vehicles; end deployment of NWs; NNWS; initiate negotiations to reduce US/Russian arsenals; bring F, PRC into disarmament process; agree to reciprocal NFU; extend non-use pledge to NNWS | All states develop &amp; support “environment favourable” to elimination, but progress should not be contingent upon political/security change |
|           | Reinforcing steps: Steps to prevent further horizontal proliferation; develop verification regime; cease production of fissile materials for military purposes | Horizontal proliferation under control: incorporation of states outside NPT regime; steps to address states’ security needs in regions of tension |
| Steps Concurrent with Entire Process | Actions to “build an environment conducive to nuclear disarmament and non-proliferation”: constraints on strategic nuclear BMs; NWFZs; constraints on nuclear trade and export controls; elimination of other WMD | High confidence in early detection of cheaters and punishment of violations |</p>
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<tr>
<td>Final Steps</td>
<td>UK, F, PRC: reduce nuclear arsenals when US/Russian arsenals</td>
<td>No fundamental change in nature of international relations</td>
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<td>“sufficiently reduced”</td>
<td>Unprecedented cooperation and transparency; good relations among global powers</td>
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<td>States with “presumed” NW potential subject to international</td>
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<td>constraints</td>
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<td>New legal arrangements (NW convention or separate but mutually</td>
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<td></td>
<td>reinforcing instruments)</td>
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<td>**National Academy of Sciences, The Future of U.S. Nuclear Weapons</td>
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<td><strong>Policy (1997)</strong></td>
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<td>1</td>
<td>US &amp; Russia: ratify START II; negotiate START II to reduce to ~2000</td>
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<td>warheads each, then negotiate reductions to ~100s each; reduce alert</td>
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<td>levels; reorient nuclear doctrine away from rapid, massive response;</td>
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<td>Unprecedented cooperation and transparency; good relations among</td>
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<td></td>
<td>maintain ABM treaty; improve protection of NWs &amp; fissile materials</td>
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<td></td>
<td>in Russia</td>
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<td></td>
<td>US: NFU policy; support NWFZ agreements</td>
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<td>Global: improve standards for accounting, transparency, and physical</td>
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<td>security for fissile materials</td>
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<td>T-3: freeze or eliminate programs</td>
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<tr>
<td>I</td>
<td>US &amp; Russia: remove 1000 warheads from operational strategic launchers &amp; place in designated storage areas away from launchers; encourage Russians to station observers &amp; invite reciprocity; remove additional 2000-3000, reducing deployed warheads to ~1000 each; cooperative development of modest defenses. US: adopt NFU policy; negotiate mutual NFU pledges with Russia &amp; PRC</td>
<td>High level of international trust &amp; cooperation</td>
</tr>
<tr>
<td>II</td>
<td>Declared NWS: reduce deployed warheads to ~200 each, all others in &quot;escrow&quot; Complete global NFU treaty with sanctions against violators; establishing intrusive multinational verification regime</td>
<td>Strong international aversion and response to potential nuclear aggressors</td>
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Stansfield Turner, *Caging the Nuclear Genie* (1997)

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<td></td>
<td>Progressive steps toward &quot;virtual nuclear arsenal&quot; (VNA) arrangement: nuclear powers agree to de-targeting and partial de-alerting of nuclear arsenals; remove warheads from missiles, leaving 100-200 as reserve; destroy all warheads except reserve or disassemble and store separately</td>
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<td>Establish multilateral monitoring system of various parts of VNA</td>
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</table>
Appendix 2: Sources on Alternative Nuclear Futures

Books


**Articles, Monographs, and Reports**


----------. “Compliance with and Strengthening of the Non-Proliferation Regime.” Report presented at the Trilateral Symposium by ASIL, CCIL and JAIL in Atlanta, 24-26 March 1996.


Cathleen S. Fisher


Reformations and Resistance: NGO’s and the Future of Nuclear Weapons


Reed, Thomas C. “The Role of Nuclear Weapons in the New World Order.” Briefing presented to the JSTPS/SAG, Department of Defense, 10 October 1991.


