



**ELEMENTS OF A
NUCLEAR DISARMAMENT TREATY**

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Dedicated to Max Kampelman
Our Inspiration

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PREFACE

The past few years have seen repeated pledges by the leaders of nuclear weapon states to work toward the goal of a world without nuclear weapons. Despite the solemnity of these rhetorical commitments, this same time period has witnessed only limited progress – baby steps, really – toward achievement of the goal. When our co-founder Dr. Barry Blechman rejoined Stimson in April 2008, he did so in the hope of helping persuade government officials in all nations to work more assiduously for a nuclear weapons-free world. For the past 20 months, he and Alex Bollfrass have explored the technical and political feasibility of moving toward the elimination of nuclear weapons from all nations.

I am pleased to present, Elements of a Nuclear Disarmament Treaty, which examines the technical obstacles to eliminating nuclear weapons and how they could be overcome. The authors find that, for the most part, the means necessary to govern, verify, and enforce nuclear disarmament are already known, as are the means to safeguard civilian nuclear facilities and materials, and that most are already embodied in previous treaties and state practices. The main obstacles to nuclear disarmament are the continuing judgments by key governments that nuclear weapons are necessary elements in their national security policies. Disarmament will only be achieved when those governments reach the conclusion, as have the editors of this volume, that the actual risks of current trends in proliferation and international conflicts far outweigh the putative contributions of nuclear weapons to nations' security, to say nothing of the hypothetical risks of a disarmed world.

This new volume examines how a disarmament treaty might be governed, verified, and enforced, and how nuclear energy materials can be protected against being diverted to weapon purposes. Some of the chapters have been prepared by Stimson staff; others by noted experts at other institutions. The book also examines, at length, the incentives and risks that any government contemplating cheating on an agreement would have to confront and, finally, compares the risks of a disarmed world to those of the world in which we live – a world of proliferating weapon technologies and the threat of catastrophic nuclear terrorism. I hope you will find this new Stimson publication a useful contribution to the debate on one of the most compelling issues of our age.

Sincerely,
Ellen Laipson
President and CEO
The Stimson Center

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Barry Blechman and Alex Bollfrass
Editors

ALSO FROM STIMSON

In 2009, Stimson published a series of six reports covering 13 countries that possess nuclear weapons or that are possible future proliferators. Each report, all but one authored by nationals of the country in question, examines the perspectives of that nation on the utility of nuclear weapons, how those perspectives might change in the face of the regional and global spread of weapon technologies, and what would be required to bring that nation to the table to negotiate a nuclear disarmament treaty. Covering Brazil, China, France, India, Iran, Israel, Japan, North Korea, Pakistan, Russia, Turkey, the United Kingdom, and the United States, the reports can be obtained through the Stimson Center's website, www.stimson.org.

FOREWORD

For over six decades, governments and private citizens have struggled with the question of how to contain the unique dangers inherent in nuclear weapons. The most comprehensive solution – an international agreement to eliminate all existing nuclear weapons and related specialized materials and facilities, and to prohibit the production and possession of such weapons in the future – was first proposed by the United States in 1947, when it was the world's only nuclear-armed state. As the Cold War gained momentum, however, nuclear disarmament dropped off governments' agendas. Popular movements for the abolition of nuclear weapons waxed and waned episodically, depending on the degree to which international events brought nuclear dangers into focus. Throughout, governments ritualistically declared their intention to move toward the elimination of these weapons, and periodically made laudable, but limited progress toward that end. Much work remains. As we enter the second decade of the 21st century, more than 20,000 nuclear weapons still exist in national arsenals and the number of countries possessing them, or with the potential to build them, seems to be growing more rapidly.

Twenty years after the end of the Cold War, the most important characteristic of the nuclear problem is not the size of arsenals, but a fundamental change in the relative risks and benefits of their continuing existence. While risks have increased, the contributions of nuclear arsenals to nations' security have declined. As defense planners struggle to match nuclear capabilities against current and projected threats, the most convincing conclusion is that these weapons can only be relied upon to deter other nuclear weapons. This realization, coupled with the accumulation of concerns about new nuclear threats, has created an historic opportunity for transformational nuclear policies.

As a result, within the past few years, the possibility of the total elimination of nuclear weapons has gained greater and more serious attention. In addition to the growing number of national nuclear arsenals and the spread of nuclear technologies for commercial purposes, the advent of mass-casualty terrorist events has prompted people of many political persuasions, in nations all over the world, to contemplate the catastrophe that could result if these weapons of mass destruction were to fall into the hands of extremist organizations. No longer relegated to the fringes of foreign policy discussions, the pros and cons of nuclear elimination are now discussed seriously by government officials, politicians, and national security analysts in all key nations. President Obama has made elimination a central goal of US policy and has signed solemn joint statements with President Medvedev of Russia, Prime Minister Hatoyama of Japan, and

President Hu of China, among others, announcing their mutual commitment to that goal. On September 24, 2009, an extraordinary gathering of the heads-of-states of the members of the UN Security Council, including the five declared nuclear weapon states, passed a resolution in which they pledged, “to create the conditions for a world without nuclear weapons,” and elucidated a long list of steps that would move the world toward achieving that objective.

Eliminating the world’s nuclear weapons would no doubt be a long and difficult process. It would require important changes in the way some nations view the roles of these weapons in their foreign and security policies, difficult discussions of the extent and phasing of reductions by various nations, and detailed negotiations of regimes to govern, verify, and enforce the agreement, as well as to protect nuclear materials used for civilian purposes from being diverted for weapon applications. Considerable research, analysis, and experimentation by government organizations would be required to convince national leaders that elimination could be accomplished safely and fairly, without posing a threat to any nation’s security.

The current volume, Elements of a Nuclear Disarmament Treaty, offers an excellent starting point for those official discussions. Its authors describe why nuclear weapons should be eliminated and how such a process might be scheduled, including an innovative idea for “rest-stops” to permit questions about compliance to be resolved without signatories needing to withdraw from the agreement. They then present detailed ideas for how an agreement could be governed, verified, and enforced, as well as how civilian nuclear materials might be protected. They also explore the lessons learned from the implementation of the Chemical Weapons Convention, the treaty that prohibits the possession of lethal chemical weapons, governs the destruction of existing stocks, and promotes beneficial commercial uses of chemical products. Finally, in perhaps its most ground-breaking chapters, the authors examine the potentially disabling issue of cheating. Would nations find the incentives to try to cheat on a disarmament agreement irresistible? What risks would they run in attempting to sidestep the verification and enforcement described in the volume? And, most importantly, if a cheater were to succeed, what would it gain and for how long? These are essential questions for any government or political leader seriously considering policies that could eventually lead to nuclear disarmament.

Unlike other grave challenges facing the world, our understanding of the nuclear problem is not obscured by a lack of knowledge, nor is the path ahead blocked by inherent limitations in the laws of nature. The authors of Elements of a Nuclear Disarmament Treaty point out that precedents exist in past or existing international agreements, and in state practices, for most of the measures that

would have to be put in place to govern, verify, and enforce a disarmament agreement and to protect civilian nuclear materials. And for those not yet in place, there is no shortage of ideas as to how they might be accomplished.

No, the overriding obstacles are not technical; they are political. A useful companion to this volume is Stimson's previously published series of "country studies" – papers examining the perspectives of individual nations on nuclear weapons and disarmament. These papers identify the geo-strategic and political obstacles to nuclear disarmament and how they might be overcome. The nations of the world will begin moving seriously toward disarmament when the political leadership of key nations reach the conclusion that the risks implicit in the existence of these weapons exceed any potential benefit and that, therefore, it is time to make the adjustments in foreign and defense policies prerequisite to begin moving rapidly down the road toward zero.

This will require determined and sustained American leadership, leadership which need not include any steps that would reduce the security of the US or its allies. Instead, the task is to recruit all relevant countries into a negotiated, step-by-step reciprocal process. As former secretaries of defense, we understand well how difficult the policy adjustments called for in this book would be. Nonetheless, we have reached the conclusion that we can no longer afford to approach the nuclear problem from a passive posture of crisis-management. Now is the time to seize the initiative.

Elements of a Nuclear Disarmament Treaty will focus attention on the relevant questions. It does not provide all the answers, and some of its conclusions will – and should – be debated. We urge that it be studied carefully and that the US government, in cooperation with other nations, begin a serious official program to determine how to rid the world of nuclear weapons. Many unknowns currently attend a nuclear-disarmed world. But the known risks of the current trajectory of further proliferation and nuclear terrorism should compel us to move purposefully and urgently toward a world free of nuclear weapons.

Frank C. Carlucci
Former Secretary of Defense
(1987-1989)

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