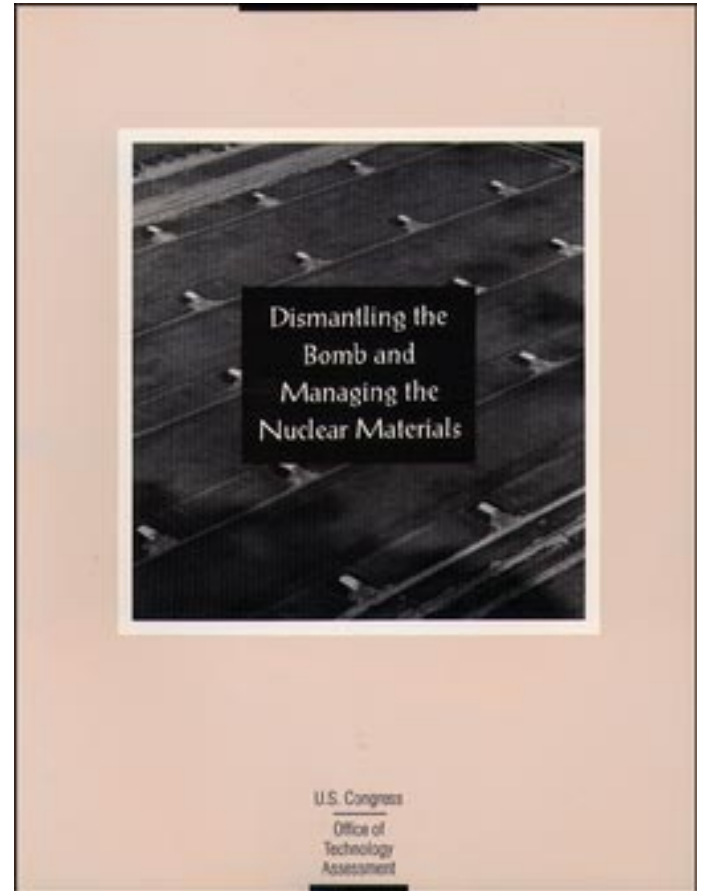


*Dismantling the Bomb and Managing the  
Nuclear Materials*

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# Foreword

**T**he Nation has embarked on a bold new mission to enhance world peace through deep and lasting cuts in nuclear arsenals. It has removed thousands of nuclear weapons from active, deployed status and has begun eliminating delivery systems and dismantling the warheads themselves. Our old Cold War adversary, the former Soviet Union, has taken similar steps. The United States and Russia have pledged to continue their programs of weapons retirement and warhead dismantlement, and are discussing methods of defining and achieving long-term goals.

Such efforts are unprecedented and challenging; they require resources and talent as well as enduring dedication within Government institutions. People are concerned that the work be conducted so as to avoid the types of adverse environmental and health impacts that resulted from nuclear weapons production in the past. Experts have been investigating how to use, control, or dispose of the nuclear materials—plutonium and highly enriched uranium—recovered from dismantled warheads. For these reasons, the Senate Committee on Governmental Affairs requested that the Office of Technology Assessment conduct a study of the key technical, policy, and institutional options to be considered in the Federal Government’s plans. The Senate Committee on Foreign Relations endorsed this request. This report presents the results of OTA’s investigations and analyses.

Although current Federal efforts are adequate for the present, they are insufficient to meet the long-term challenge ahead. OTA concludes that the success of future warhead dismantlement and materials management requires a focused, high-level governmental effort to develop a comprehensive national policy. It also requires an open decisionmaking process and capable institutions to set and implement long-range goals and plans. In this report, OTA suggests various initiatives that Congress could consider to establish a national policy, determine the next steps in warhead dismantlement and nuclear materials management, approach decisions on the ultimate disposition of nuclear materials, enhance the institutional capabilities necessary to ensure success, and encourage sound dismantlement and materials management in Russia.

Substantial assistance was received from many organizations and individuals for this study. OTA sincerely appreciates the guidance received from its advisory panel, workshop participants, numerous reviewers, contributors, consultants, and contractors. We also received help from several Federal agencies, including the Departments of Energy, Defense, and State, and other Federal, State, and local agencies. Without this cooperation and expert advice, OTA would not have been able to accomplish this study.



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*NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.*

<sup>1</sup>James D. Werner and Sherri Wasserman Goodman served on the Panel before joining DOE and DOD, respectively.

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