
STRATEGIC GUIDANCE FOR AN INTEGRATED APPROACH TO SECURITY, EMERGENCY MANAGEMENT, AND RESILIENCE

Revised and Updated Second Edition
Edited by David G. Kamien

Foreword by the Honorable Michael Chertoff
Principal of The Chertoff Group and former Secretary of Homeland Security

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Foreword

More than a decade has passed since the world witnessed the horrifying events of Tuesday, September 11, 2001. After that long ago fateful morning, the United States government put into place new policies and programs that significantly transformed the way we protect our nation from acts of terror. While the initial purpose was to implement a new regime of anti-terrorism measures, new programs that took into account threats involving both man-made and natural disasters were also developed. Whether it is increased information sharing among law enforcement and intelligence agencies, stronger border security, a layered aviation security regime, or stronger capabilities and more frequent and uniform training across all levels of government, today we are better prepared to prevent and protect against urgent threats and we have an enhanced ability to respond and quickly recover should another disaster occur.

Critical to helping us maintain this momentum is sharing our hard-won experiences with others. This handbook serves as an important contribution to this collaborative effort so that we may learn, practice and identify new ways to manage our risk and be prepared for the next generation of threats likely to emerge.

Of course, completely eliminating risk is not possible without compromising the freedoms and liberties we hold so dear. For example, we could stop all potential danger or risk from boarding a commercial airliner if we simply stopped flying. Keeping every possible danger from crossing our nation’s borders could be accomplished if we halted all imports and stopped all travel and commerce from entering our country. But these draconian scenarios are both unrealistic and undesirable. Therefore, homeland security is about risk management and not risk elimination. It is about determining what layers of security we can put in place to get the best possible protection at a reasonable cost.

Most recently, the U.S. was able to demonstrate success at reducing our risk of another potential terrorist attack on our shores with the death of Osama Bin Laden. However, this victory does not eliminate the threat of terrorism and should not foster complacency. Our adversaries are evolving; we will confront a new set of leaders who may think differently and develop novel tactics and technologies to carry out their threats.

In addition to terrorism, other actors threaten not only our homeland security but our economic well-being as well. Today’s persistent cyber threat represents an increasing highly disruptive threat to our national security; perhaps the biggest game changer since the onset of the nuclear age more than 65 years ago. Information technologies and network operations are essential to our daily lives as well as our global commerce. As a result, they continue to be targeted and attacked daily by a variety of actors ranging from today’s modern-day criminals interested in pure financial gain, to nation states seeking stronger advantages for their own global competitiveness and dominant war fighting powers. Despite various government initiatives to help mitigate our risk to cyber-attack, there is in place no comprehensive strategy for cyber defense and security. To be blunt, we lack a unified vision of the problem and a comprehensive set of solutions to tackle it.

Today more than ever, we need a knowledgeable and skilled security community to meet these challenges and others that we will certainly face. This handbook serves as an important resource so that we may learn from what has been accomplished, even in only the last few years, while building and expanding a new generation of leaders with new thinking, decision making, and strategies. We must be prepared to constantly retool our approach and adapt new plans and tactics that protect our nation without unreasonable financial and social costs.

As you read through this unique guide of critical homeland security issues, you can begin to identify where the future threats are likely to be. Through your own contributions, you can help identify the planning and tools necessary to help us best confront them.

Michael Chertoff
Chairman of The Chertoff Group
Key Features

The 2012 edition of The McGraw-Hill Homeland Security Handbook aims to foster an integrated and coordinated approach to homeland security, emergency management, and enterprise resilience. The Handbook has several important features:

• The 2012 edition of the Handbook provides extensive thematic coverage, offering an opportunity to understand how homeland security challenges are interconnected. As pointed out in the foreword to the 2006 edition, only a team of individuals with genuine crosscutting knowledge and practical experience will be able to understand the complexity of any particular homeland security challenge, devise an efficient and viable strategy for dealing with the problem, and implement this strategy effectively.

• The contributors include distinguished members of government, industry, and academia, many of whom combine theory with practical experience in homeland security and are active in educating the next generation of national security leaders.

• As no country has a monopoly on best practices, this edition has an expanded section on international approaches, with perspectives and insights from past disasters.

• This edition includes management principles, models, concepts, and specific practical guidance. Many chapters present practical steps that security, emergency preparedness, and business continuity professionals can apply immediately to create vigilant, prepared, and resilient communities and business enterprises.

• The book emphasizes the importance of systems thinking, holistic interoperability, and information sharing protocol development. The need for this emphasis stems from the reality that, since the last edition was published, the world has witnessed numerous occasions when poor information sharing and coordination undermined counterterrorism defenses and crisis consequence management following catastrophic natural disasters.

• The book covers recent homeland security policy developments, such as Presidential Policy Directive 8 (PPD-8) with National Frameworks for Prevention, Protection, Mitigation, Response, and Recovery.

• The website at www.HomelandSecurityBook.com provides valuable resources for further study.
This book is divided into 11 sections that group subject matter into thematic units, providing a framework for study and discussion.

Section I on “Terrorist and Criminal Threats” discusses the threat from Islamist Jihadists, inspired by bin Laden and Al-Qaeda, who want to impact Western adversaries by combining smaller attacks to drive up security costs—for example, against surface transportation, with occasional large-scale plots, possibly using weapons of mass destruction (WMD). A chapter on the psychology of terrorists raises the question of whether there is such thing as a terrorist personality or profile, and warns that this notion can have dangerous consequences and implications for counterterrorism. The section also examines highly intensive criminality—crime that has morphed into a chaotic phenomenon so endemic and severe that it should be considered a national security matter.

Section II on “Policy, Governance, and Legal Responses” chronicles the major changes in national preparedness policy, counterterrorism legislation, and efforts to prosecute the financing of terrorism since September of 2001. The section addresses the evolution of federal intelligence information sharing policy and initiatives in this area. The section also describes a critical gap in US homeland security—the lack of policy governing information sharing planning (ISP)—a policy needed to motivate agencies to develop documented information-sharing protocols vital to enhance cross-organizational integration and operational coordination, and support performance improvement and governance.

Section III on “Interoperability, Information Sharing, and Collaboration” emphasizes the importance of holistic interoperability, information sharing, and collaboration for national security. The section offers a deep analysis of the various types of historic interoperability and information-sharing failures. It then presents efforts to enable terrorism-related information to flow vertically and horizontally between partners in different levels of government, including the establishment of an Information Sharing Environment (ISE) and state and local intelligence fusion centers.

Section IV on “Risk Management, Decision Making, and Communication” explains that the key to risk analysis is to use a systematic and tailored process to identify critical system assets, assess risks, and make smart risk-management decisions. The section also discusses fundamental aspects of the psychological perception of risk and risk communication issues and initiatives such as the National Terrorism Advisory System, designed to communicate clear, timely, and specific information about the nature of the terrorist threat.

Section V on “Protecting Critical Infrastructure” discusses the evolution of civil aviation security, strategies to enhance cybersecurity, and methods for protecting critical infrastructure such as water utilities. It also provides in-depth examination of the topic of interdependency between infrastructures. The section includes a Regional Infrastructure Protection Guide developed by and for practitioners.

Section VI on “Disaster Preparedness and Emergency Management” addresses key fundamentals of emergency response and the challenges associated with communications and radio systems interoperability. In this section, homeland security leaders from New Orleans share the lessons their city learned from Hurricane Katrina. The section also presents the importance of “meta-leadership,” a framework and practice method designed for the challenges of leading in complex situations. The final chapter in the sections addresses the need for emergency managers and other leaders to access expert legal advice when confronting real-time dilemmas in crisis situations fraught with uncertainty and grave consequences for the public.
Section VII on “Private Sector Security, and Resilience” presents successful approaches to corporate security, emergency management, and business continuity as well as models for public–private sector initiatives dealing with community preparedness and regional resilience. It also offers valuable guidance about the international ISO-28000 standard for supply chain security and resilience.

Section VIII on “Thinking, Education, and Training” explains why coping with the dynamic complexity of the homeland security area requires systems thinking, and why no single discipline can achieve a comprehensive understanding of terrorism or homeland security. The section offers a theoretical foundation for interdisciplinary study and homeland security education. Also included in this section is a chapter on emergency exercise design and evaluation.

Section IX on “Science and Technology” covers a range of topics—it presents information technology solution architecture and technology to support emergency incident command and information sharing among disparate organizations. The section also discusses the importance of Geographical Information Systems (GIS) and how to leverage crowdsourcing and social media tools in disaster response. The section includes practical guidance for technology vendors interested in selling technology to government homeland security buyers, and a promising new model that the Department of Homeland Security (DHS) Science & Technology Directorate is using to actively seek out relatively mature technology solutions that can be modified to rapidly address defined operational capability needs or problems.

Section X on “Civil Liberties and Other Legal Issues” discusses topics related to the law—civil liberties questions, the evolution of counterterrorism legislation, and government data mining.

Section XI on “International Challenges and Approaches” emphasizes the importance of comparative analysis and covers counterterrorism policy in the European Union and India, Sweden’s approach to whole-of-society disaster resilience, Chile’s response to the 2010 earthquake and tsunami, the Fukushima Nuclear disaster in Japan, and the status of global commitment to disaster risk management under the United Nations’ Hyogo Framework for Action (HFA).

The book concludes with a brief call-to-action chapter meant to guide leaders in the homeland security community.
Acknowledgements

This book would not have been possible without the generous contributions of the participating authors and their staff, the editorial support of Bev Weiler, and the valuable suggestions from Claire B. Rubin. I deeply appreciate their help and the support and encouragement provided by: Felice Maranz, Roger Kamien, Anita Kamien, Stuart Friedman, Jean-François Cloutier, Howard Steinberg, Romit Chatterjee, Andy Mazzeo, Jan Ithier, Kiki Lawal, Stephen Rodriguez, Ron Krakower, David Steiner, Mike Horsefield, John Voeller, Andy Lauland, Randall Larsen, Cal Downs, Ray Bjorklund, Dennis Quinn, Chad Sweet, and many others who willingly provided advice, reviews, and moral support during this year-long endeavor. I would also like to thank Mary Glenn and the excellent publishing staff at McGraw-Hill for their patience and willingness to support this project.
Contributor’s List

David G. Kamien
CEO & Co-Founder
Mind-Alliance Systems, LLC

Hon. Michael Chertoff
Chairman of The Chertoff Group
Former Secretary of the
US Department of Homeland Security

Daveed Gartenstein-Ross
Senior Fellow, The Foundation for Defense of Democracies
Lecturer in World Politics,
The Catholic University of America

Brian Michael Jenkins
Director, National Transportation Security Center at
The Mineta Transportation Institute

Jean-François Gayraud
Police Superintendent
High Council for Strategic Education and Research

Dr. John F. Morrison
Senior Lecturer in Criminology and Criminal Justice
University of East London, UK

Bob Graham
Bipartisan WMD Terrorism Research Center

Randall Larsen
Founding Director
WMD Center

Lynne Kidder
Bipartisan WMD Terrorism Research Center

Sharon L. Caudle, Ph.D.
Younger-Carter Distinguished Policymaker in Residence
Texas A&M University

Jimmy Gurulé
Professor of Law
Notre Dame School of Law
Notre Dame University

Michael Kraft
Counterterrorism Consultant and Writer
Kraft Associates

Brent Davidson, J.D.
International Policy Analyst
The International Security and Biopolicy Institute

Christian Beckner
Congressional Staff Member

William J. Bratton
Chairman
Kroll Advisory Solutions, Inc.

Robert I. Desourdis, Jr.
Science Applications International Corporation

Jean-François Cloutier
Co-Founder
Mind-Alliance Systems, LLC

Kshemendra Paul
Program Manager
Information Sharing Environment

W. Ross Ashley, III
Executive Director
National Fusion Center Association

Ray Guidetti
Captain
New Jersey Regional Operations Intelligence Center

Steven Pugh
Cyberspace Defense Officer
United States Air Force

Dr. Gregory Parnell
Professor of System Engineering
US Military Academy at West Point

Dr. Robin Dillon-Merrill
Associate Professor
McDonough School of Business
Georgetown University

Terry A. Bresnick
President
Innovative Decisions Analysis
Contributor’s List (Cont.)

Ari Vidali
Founder and CEO
Envisage Technologies Corp.

Jason D. Hutchens
Director, Planning and Assessment
Indiana Department of Homeland Security

Baruch Fischhoff
Howard Heinz University Professor
Department of Social and Decision Sciences
Carnegie Mellon University

James Carafano
Deputy Director
The Kathryn and Shelby Cullom Davis Institute for National Studies
The Heritage Foundation

Jessica Zuckerman
Research Associate
Homeland Security and Latin America
The Heritage Foundation

Joseph Nimmich
Retired Admiral, US Coast Guard
Raytheon Homeland Security

Rae Zimmerman
Professor of Planning and Public Administration
Director, Institute for Civil Infrastructure Systems
Wagner Graduate School of Public Service
New York University

Stanley States, Ph.D.
Director of Water Quality and Production
Pittsburgh Water and Sewer Authority

Rafi Ron
CEO
New Age Security Solutions

Robert Faber
Former Senior Oversight Counsel
U.S. House Transportation Committee

Paula L. Scalingi, Ph.D.
Executive Director
Bay Area Center for Regional Disaster Resilience

Gregory T. Brunelle
1st Deputy Director
New York State Office of Emergency Management

Claire B. Rubin
President
Claire B. Rubin & Associates, LLC

Jude Colle
Principal
Jude Colle & Associates

Lt. Col. J.W. Sneed (Retired, USMC)
Deputy Mayor of Public Safety
Director of the Office of Homeland Security & Emergency Preparedness
City of New Orleans

Stephen A. Murphy
Former Planning Section Chief
Current Director of Emergency Management
Loyola University

Matthew A. Kallmyer
Former Deputy Director
Current Director
Atlanta–Fulton County Emergency Mgmt. Agency

Governor Martin O’Malley
State of Maryland

Ray Lehr
Statewide Interoperability Director
State of Maryland

Terri L. Tanielian
Senior Research Analyst
RAND Corporation
Contributor’s List (Cont.)

Bradley D. Stein, M.D., Ph.D.
Senior Scientist
RAND Corporation

Dr. Leonard J. Marcus
Founding Co-Director
National Preparedness Leadership Initiative
Harvard University

Dr. Barry C. Dorn
Associate Director
National Preparedness Leadership Initiative
Harvard University

Dr. Isaac Ashkenazi
Director of Urban Terrorism Preparedness
National Preparedness Leadership Initiative
Harvard University

Joseph M. Henderson, M.A.
Senior Executive
Centers for Disease Control and Prevention

Eric J. McNulty
Senior Editorial Associate
National Preparedness Leadership Initiative
Harvard University

Eric Stern
Co-Chairman of the Critical Incident Analysis Group
University of Virginia

Gregory Saathoff, M.D.
Executive Director of the Critical Incident Analysis Group
University of Virginia

Brad Kieserman
Chief Counsel
Federal Emergency Management Agency

Ira Tannenbaum
Director of Public/Private Initiatives
New York City Office of Emergency Management

Ronald J. Kelly
Former Director of Corporate Security
IBM Corporation

Donald L. Schmidt, ARM, CBCP, CBCLA, CEM
CEO
Preparedness, LLC

William A. Gouveia, Jr.
Managing Director, Consulting
SunGard Availability Services

Stephen Flynn
Co-Director of the Kostas Research Institute for Homeland Security
Professor of Political Science
Northeastern University

Sean Burke
Associate Director
Kostas Research Institute for Homeland Security

M. John Plodinec
Associate Director, Resilience Technologies
Community and Regional Resilience Institute

W.C. Edwards
Community and Regional Resilience Institute

Richard Stones, MSc CSyp FSyI
Security Director
UK National Business Crime Forum

Daniel Stevens
Training Coordinator and National Planning Cadre Manager
Department of Homeland Security
FEMA, Response Directorate

Sibel McGee, Ph.D.
Principal Analyst
Applied Systems Thinking Institute
Analytic Services, Inc.

Linda Kiltz, Ph.D.
Assistant Professor of Public Administration
Texas A&M University, Corpus Christi

Robert McCreight
Professor
Institute for Crisis, Disaster & Risk Management
George Washington University
Contributor’s List (Cont.)

Irmak Renda-Tanali, D.Sc.
Collegiate Associate Professor
Director of Homeland Security and Emergency Management Master’s Programs
University of Maryland, University College

John G. Voeller
Senior Vice President
Black & Veatch

Donald S. Adams
Vice President, Chief Security Office, & Chief Technology Officer, Worldwide Government
TIBCO Software, Inc.

Russ Johnson
Director, Public Safety Industry Solutions
Esri

Michael Hopmeier
President
Unconventional Concepts, Inc.

Jeannie Stamberger, Ph.D.
Researcher
Peace Innovation Lab
Stanford University

Ahmed Nagy
Doctoral Candidate
IMT Institute for Advanced Studies
Lucca, Italy

James W. Morentz, Ph.D.
Principal
JWMorentz, LLC

Rick Wimberly
CEO
Government Selling Solutions/Galain Solutions, Inc.

K.A. Taipale
Founder and Executive Director
Stilwell Center

Laura W. Murphy
Director, Washington Legislative Office
American Civil Liberties Union

Newton N. Minow
Senior Counsel
Sidley Austin LL.P.

Fred H. Cate
Distinguished Professor and C. Ben Dutton Professor Law
Indiana University Maurer School of Law

Margareta Wahlstrom
UN Secretary General’s Special Representative for Disaster Risk Reduction
Head of UNISDR
UN Office for Disaster Risk Reduction

Capt. Charles H. Piersall
Chairman
ISO Committee on Ships and Marine Technology (ISO/TC8)

James M. Acton
Senior Associate of the Nuclear Policy Program
Carnegie Endowment for International Peace

Mark Hibbs
Senior Associate of the Nuclear Policy Program
Carnegie Endowment for International Peace

Helena Lindberg
Director General
Swedish Civil Contingencies Agency

Bengt Sundelius
Professor of Government
Swedish National Defense College

R.V. Raju
Former Director General
National Investigation Agency of India

Nick Lavars
Journalist
The Santiago Times

Gilles De Kerchove
Coordinator
European Union Counterterrorism
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